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Contract 98, Appendix F

Self-Assessment Report for Fiscal Year 2003

October 2003

Ernest Orlando Lawrence Berkeley National Laboratory

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Contents

Note

Please note that the Performance Objective, Criteria, and Measures language printed in boldface, sans serif type in this report faithfully reproduces the substance of this language in Department of Energy Contract No. DE-AC03-76SF00098. The language has been edited in this report, however, for clarity.

Overview

Overview

This report summarizes the Ernest Orlando Lawrence Berkeley National Laboratory internal assessment of Laboratory operational and administrative performance in key support functions for Fiscal Year (FY) 2003. The report provides documentation of ongoing performance-based management and oversight processes required by the Department of Energy (DOE) to monitor, measure, and evaluate Berkeley Lab work.

Purpose and Scope of Annual Performance Review

Berkeley Lab is a multiprogram national research facility operated by the University of California (UC) for the Department of Energy (DOE). As an integral element of DOE's national laboratory system, Berkeley Lab supports DOE's missions in fundamental science, energy resources, environmental quality, and national security. Berkeley Lab programs advance four distinct goals for DOE and the nation:

- To perform leading multidisciplinary research in the computing sciences, physical sciences, energy sciences, biosciences, and general sciences in a manner that ensures employee and public safety, and protection of the environment.
- To develop and operate unique national experimental facilities for qualified investigators.
- To educate and train future generations of scientists and engineers to promote national science and education goals.
- To transfer knowledge and technological innovations and to foster productive relationships among Berkeley Lab's research programs, universities, and industry in order to promote the nation's economy and security.

The Laboratory's programmatic performance is aligned with its principal roles for DOE in research on fundamental science topics, including developing powerful experimental and computational systems for exploring properties of matter, promoting improved understanding of molecular interactions and synthesis, and gaining insight into biological molecules, cells, and tissues. Berkeley Lab performance also reflects its major contributing role in research on energy resources, including the Earth's structure and energy reservoirs, fusion, combustion of fuels, and keys to efficient energy storage and use. The Laboratory's performance also incorporates its extensive involvement in environmental research, including subsurface contaminant transport, bioremediation, and indoor air quality. Our multidisciplinary research environment and unique location serve to strengthen partnerships with universities, industry, and government laboratories. Partnerships include the Joint Genome Institute and programs in advanced accelerator and detector systems, x-ray lithography, high-speed networking and computer architectures, efficient building and lighting systems, and science education.

All work at Berkeley Lab is managed under a DOE performance-based contract (Contract No. DE-AC03-76SF00098), which is available at http://labs.ucop.edu/internet/comix. Clause 2.6 and Appendix F of this contract describe in detail the structural elements, implementing processes, governing procedures, and reporting requirements of this federal contractor management system. The system is structured around two main subsystems for contractor appraisal:

- Science and Technology programs
- Operational and Administrative support

Evaluation of Science and Technology Programs

Internationally renowned scientists and engineers examine Berkeley Lab's performance in the arena of science and technology through peer reviews of the Laboratory's scientific programs. The criteria employed for these reviews include the quality of science, its relevance to national needs and agency missions, performance in the development and operation of major research facilities, and programmatic performance and planning. The results of these peer reviews, together with expert reviews done annually by DOE's principal project managers and sponsoring offices, are summarized in an appraisal report that rates Laboratory science and technology performance for FY 2003.

Evaluation of Operations and Administration

An institutional commitment to mission leadership and optimally managed facilities, resources, and services is fundamental to the Laboratory's approach to operational and administrative functions. Adherence to these principles in the management of all supporting systems, services, resources, and capabilities is shown in the performance criteria and evaluation metrics used to assess the operations and administration areas within this report.

The operational and administrative support functions are organized into eight areas:

- Laboratory Management
- Environment, Safety, and Health
- Financial Management
- Human Resources
- Information Technology Infrastructure
- Procurement
- Project/Facilities and Construction Management
- Property Management

Consistent with DOE contractual directions, performance criteria and associated metrics are developed annually by teams composed of key managers and staff of DOE and UC for each area. Through this partnership process, a comprehensive set of performance metrics is designed to guide and gauge Laboratory performance. Throughout the year, Berkeley Lab managers for each function compile the needed data and, if appropriate, periodically inform DOE counterparts of performance indicators. For the entire year, these managers report cumulative data and self-assess their performance with respect to each metric. Finally, both the data and the self-assessment are independently validated before being included in this report.

FY-2003 Performance Review Summary

Berkeley Lab conducted a comprehensive assessment of its performance in all science and support areas for the fiscal year. The science and technology assessment was reported in a separate document submitted to DOE in August 2003. The FY-2003 operational and administrative performance self-assessment is summarized in this report; selected highlights for FY 2003 at Berkeley Lab follow.

Laboratory Management

Working closely with the leadership of the Office of Science, the Laboratory Director articulated a 20-Year Vision on the future of Berkeley Lab. Berkeley Lab and Office of Science managers addressed opportunities and issues, which included progress on science goals and programs, upgrading of infrastructure and business systems, and appropriate improved security systems. The Laboratory made progress on key infrastructure stewardship issues: new Laboratory buildings, utilities improvements, and deconstruction of decommissioned accelerators.

The Laboratory Director established a Best Practices Diversity Council for strengthening and institutionalizing the best efforts among divisions, and to more broadly disseminate these successful efforts across the Laboratory.

Berkeley Lab's community relations gained new levels of support from local governments. A new Friends of Science program continued to grow. Laboratory representatives continued active participation and partnering with city officials and other stakeholders. The Laboratory's Open house hosted an unprecedented 8,000 visitors.

During FY 2003, it became apparent that prior Laboratory initiatives designed to streamline business processes and to make business practices more cost-efficient resulted in inadequate internal controls of some key Laboratory business activities. The Laboratory initiated several internal audits and process reviews as part of continuing efforts to tighten up business practices and reduce risks in these areas. As a result, several changes have been instituted, including: (1) an improved procurement card system was implemented; (2) property cost accounting and custodial accountability has been strengthened; and (3) better administrative and oversight requirements for subcontractor management were implemented.

Environment, Safety, and Health

Laboratory work in these areas continued to excel, with these notable radiological safety highlights:

- No individual had radiation exposures over 500 mrem.
- There were no unplanned radiation exposures at the Laboratory.
- No radioactive material was found outside of controlled areas.

Financial Management

Financial support services continued an overall excellent performance during a time of many changes. However, two significant erroneous activities in earlier years came to light in FY 2003 (improper ESnet payments and improper capital asset administration) that required major corrective actions and some strengthening of Financial Management systems.

Human Resources

Human Resources (HR) at LBNL is going through a period of significant change, with these noteworthy examples:

- HR is on schedule in rolling out an entirely new set of guidelines, based on national standards.
- HR began instituting a flexible-work-option program.

Information Technology Infrastructure

- The Help Desk continues to sustain a high level of customer satisfaction and service in all areas.
- In a new measure for cyber security, Protected Computer Environment, the Berkeley Lab Computer Protection Program (CPP) met the standard for an Outstanding performance rating.

Procurement

Procurement functions met or exceeded all expectations established under the contract. Nevertheless, responding to a DOE Chief Financial Officer/Headquarters review of Berkeley Lab's procurement card activities, the Laboratory overhauled the LBNL purchase card program, so that the procurement card system now addresses all the issues raised by DOE.

Project/Facilities and Construction Management

Overall work in this functional area continued to be outstanding, with these specific high points in Laboratory site operations:

- Electrical reliability continued at better than 99.9998%.
- The Laboratory continued to surpass its energy conservation criteria.
- Unplanned customer utility outages dropped from 15,810 to 265.

Property Management

Property Management successfully continued to operate and meet its overall work criteria. But property practices and administrative criteria were tightened in reaction to the findings of several recent external audits and to the conclusions of the internal review of capital asset administration.

Self-Assessment Report for Fiscal Year 2003

Laboratory Management

Ernest Orlando Lawrence Berkeley National Laboratory

Performance Characterization

In fiscal year (FY) 2003, Berkeley Lab's Director Charles V. Shank continued to align the Laboratory's strategic directions with the Department of Energy (DOE) mission and the Office of Science (SC) plans and objectives. Working closely with the leadership of the Office of Science, the Director articulated a 20-Year Vision on the future of Berkeley Lab. Berkeley Lab and Office of Science managers addressed opportunities and issues, which included progress on science goals and programs, infrastructure, business systems, and appropriate security systems. The Laboratory made progress on key infrastructure stewardship issues: new Laboratory buildings, utilities improvements, and deconstruction of decommissioned accelerators.

In the area of business management, the Laboratory initiated several internal audits and process reviews as part of continuing efforts to tighten up business practices and reduce risks. Through these audits and reviews, it became apparent that prior Laboratory initiatives to streamline business processes and to make business practices more cost-efficient resulted in inadequate internal controls of some Laboratory activities associated with procurement, property, accounting records, and contractor/vendor interfaces. As a result, several changes have been made. A new procurement card system was implemented, with the number of authorized users reduced, and the requirements for user documentation, review, and manager oversight strengthened. In another matter, property cost accounting and custodial record keeping has been improved and, through efforts initiated by the University of California (UC), sensitive property now includes a larger list of items with a core list for the three UC laboratories.

A program for elevated levels of security against possible terrorist threats protects Laboratory employees and infrastructure, while allowing the Laboratory to remain open to visiting scientists. The cybersecurity program and plans, as a sustained and effective communications and information management system, protects DOE assets, as a sustained and effective communications and information management system.

In support of DOE's mission, and to advance the Laboratory's strategic science goals, Berkeley Lab's unique facilities and scientific resources are made available to other government agencies, universities, and industry. As the use of the Laboratory's national scientific facilities expands and the diversity of sponsors aligned with our strategic goals grows, the amount of non-DOE research will grow. Growth is consistent with DOE's interest in full access and utilization of the Laboratory's unique capabilities.

Berkeley Lab's community relations gained new levels of support from local governments. A new Friends of Science program continued to grow. Laboratory representatives continued active participation and dialogue in

meetings with city officials and other stakeholders. The Laboratory's Open house hosted an unprecedented 8,000 visitors.

The following examples are FY-2003 outcomes:

- Funding for a Molecular Foundry in support of the National Nanoscience and Technology Initiative. The project is on track for groundbreaking in December 2003.
- Growth of the Advanced Light Source (ALS). Three new beamlines were completed, and the Molecular Environmental Sciences beamline was commissioned. Seventeen hundred users are expected at the ALS by the end of the fiscal year.
- Advancing an astrophysics program to define the fundamental properties of the universe. The SuperNova/Acceleration Probe (SNAP) funding is included in the President's budget.
- The National Energy Research Scientific Computing (NERSC) Center expanded its IBM SP, making it the most powerful computer in the United States for unclassified research, with 6,656 processors and a peak performance of 10 teraflop/s (trillions of floating-point operations per second). A single NERSC computer has the largest aggregate memory of any unclassified computer in the United States—7.8 terabytes (trillion bytes)—with 44 terabytes of disk storage.
- The inertial fusion energy (IFE) science program has made consistent progress and is in the final stages of its “proof-of-concept.” The High Current Experiment is exploring the limits in current-carrying capability of an accelerator of intense beams, and has produced promising results regarding the cost of the driver.
- Internal audits and reviews were conducted, with the result that new procedures and business process controls are being implemented for procurement, property, records, financial documentation, and invoicing to improve Laboratory stewardship of public funds. Additional improvements are forthcoming.
- The projected ratio of research-to-support staff costs remained unchanged from last year at 2.2. Management stewardship limited the overall indirect-rate growth despite increases for waste management, travel systems support, and other required nondirect costs. Payroll burden increases, primarily from increases in health-related benefits, were also carefully managed.
- Dr. Shank established a new Best Practices Diversity Council (BPDC) for strengthening and institutionalizing the best efforts among divisions, and to more broadly disseminate these efforts across the Laboratory.

Performance Objective #1

Laboratory Leadership: *Laboratory leadership, in support of Laboratory missions, ensures the stewardship and viability of the institution.* **(Weight = 100%)**

Summary

Berkeley Lab senior management advanced the missions of DOE through leadership in science, energy, and environmental research. Laboratory leadership continued to align the Laboratory's strategic directions and competencies with DOE plans and objectives to achieve progress toward key objectives and critical outcomes. Berkeley Lab's plans continued to be coordinated through the FY-2003 Comprehensive Planning Calendar. The Director of Laboratory planning participated in DOE workshops and was part of the DOE Headquarters (HQ) team that prepared the draft SC Strategic Plan.

The Laboratory continued to effectively manage funding and resources in support of its goal to conduct quality research and development while protecting the public's investment in science. Several systems and reporting tools were used to provide essential information to senior management for strategic planning and informed decisions. The Procurement/Receiving/ Payables System, for example, provided a streamlined method for processing procurements, receivables, and payables, and integrating quality controls and efficient operations.

The Laboratory continued to enhance its effectiveness in managing the growing research support from other sponsors. While the Sponsored Projects Office (SPO) is responsible for institutional endorsements of proposals and acceptance of funding awards, many other Laboratory organizations, such as the Office of Planning and Strategic Development, Administrative Support Department, Technology Transfer Office, Patent Department, and Financial Services Department, contribute to the management of the program. These offices worked to provide constructive relationships with sponsors and to coordinate information for the DOE Berkeley Site Office (BSO) and with DOE Headquarters (HQ).

Laboratory Management participated in community activities, including local boards and commissions, educational organizations, Chambers of Commerce, community foundations, and environmental groups, as well as service clubs. Management also endorsed enhanced communication with community groups through the wider distribution of Laboratory news and the Community Relations/Science Education outreach program, Berkeley Lab Friends of Science. The Public Affairs Office continued its expanded role as liaison to key stakeholders in the local and regional community.

Berkeley Lab division management engaged in the annual diversity review and planning program, submitting diversity action plans that target their short- and long-term staffing and recruiting needs. Division managers conducted specific efforts toward diversity outreach and student internships

activities supported by the Laboratory's School-to-Career and Center for Science and Engineering Education programs. Berkeley Lab's School-to-Career and mentorship program has nearly doubled the number of student interns, advancing the diversity planning and science mission for DOE.

Objective #1 Criterion 1.1

Institutional Stewardship and Viability: *Evaluation of Laboratory senior management's approach, deployment, and results for ensuring that the institution is capable of executing its current and future missions.* (**Weight = 100%)**

Objective #1 Criterion 1.1 Performance Measure 1.1.a

Strategic Planning: *Evaluation of management's approach for strategic planning that aligns Laboratory vision, goals, programs, resources, facilities, and performance expectations with DOE's mission, strategic plans, and objectives. The assessment focuses on achievement of the key objectives contained in the Laboratory's plans and how this information is communicated with DOE*. **(Weight = 20.0%)**

Assumption:

Weighting for Approach/Deployment and Results: A/D = 40%, R = 60%.

Gradient: See Table 1 at the end of this section.

Performance Measure Result

Management Approach for Strategic Planning

Berkeley Lab Director Charles V. Shank continued to work closely with DOE officials to advance DOE missions through strategic goals that align the Laboratory's scientific and operational activities with DOE's scientific and management priorities. On behalf of DOE, SC especially, and Berkeley Lab's national role for all research sponsors, the Director and his management team also continued to address and improve accountability and business practices to execute its programs.

In FY 2003, Berkeley Lab and SC leadership initiated a management roundtable for candid discussions on the 20-year future of the Laboratory. This roundtable addressed the Laboratory's challenge to become more than a collection of independent research programs. We are moving from a multiprogram organization of excellent independent efforts to program "interdependence" that creates and sustains value from program diversity.

The scientific goals founded on these strengths are identified in a new 20-Year Vision for Berkeley Lab and is included in the Director's Statement, which prefaces Berkeley Lab's Institutional Plan. These goals were reviewed with DOE programmatic officials during the roundtable and in a range of management settings at Berkeley and DOE HQ. Recent planning cycles have included a number of critical objectives in key areas:

- *Discover the composition of the universe through particle astrophysics and the measurement of dark energy.* Berkeley Lab is undertaking a research and planning effort for an astrophysics satellite program that will define the fundamental properties of the universe through the observation of supernovae.

- *Understand and engineer living systems for Department of Energy Missions.* In the era that follows the sequencing of the human genome, a new biology program for the Office of Science is directed at developing more predictive and quantitative understanding and control of microbiological systems.
- *Design radically new generations of materials with tailored properties.* Berkeley Lab proposes a Molecular Foundry to advance the Office of Science role in the National Nanotechnology Initiative.
- *Achieve research breakthroughs using soft x-ray and ultrafast science tools.* Berkeley Lab has been working with the community of scientists interested in ultrafast phenomena to develop powerful scientific tools to address this area of science.
- *Enable dramatic discoveries through science-driven computer architectures.* The NERSC Center, other laboratories, and computer manufacturers formed partnerships to develop a new generation of computing architectures tailored to scientific applications. These new architectures offer the promise of the most powerful data analysis and simulations possible, addressing DOE scientific demands, including those coupled to energy security and the environment, living systems, and the properties of matter and energy in the universe.
- *Advance inertial fusion energy research for electric power generation through heavy-ion drivers.* The heavy-ion fusion concept makes use of decades of DOE-funded accelerator development for high energy and nuclear physics to develop a heavy-ion accelerator as the driver to compress inertial fusion targets. Among fusion concepts, heavy-ion fusion is unique in its ability to protect the fusion chamber from neutron and blast damage, making a possible lifetime for a carbon-free electrical power source decades long.
- *Understand global climate change and develop carbon sequestration strategies.* Berkeley Lab is advancing the frontiers of knowledge in all three DOE emphasis areas for carbon sequestration—soils, oceans, and geologic reservoirs.

Achieving these goals will have major scientific and societal consequences. For example, advancing the ability to exploit the extraordinary processes and structures of living systems will have broad impacts, from improving energy security to understanding human disease. Fabricating new generations of materials forged at atomic scale will reduce the environmental impact of manufacturing, and will gain energy efficiency with advanced technologies. Discovering the composition and fate of the universe will be a big step in understanding the nature of the earth in the cosmos.

Berkeley Lab senior management maintained communications with DOE managers to advance these objectives and other issues. Significant follow-up was also achieved by project and program scientific leaders with

DOE managers and with the national scientific community. The Director's management activities involved participation in DOE and SC Directors' meetings, and regular meetings with the SC Director, DOE/SC Associate Directors, and the BSO Manager.

As indicated above, Berkeley Lab planned and conducted a new approach to the institutional review with the SC Director through a "roundtable" format that focused on special topics and issues of particular interest to both the Laboratory and DOE. Within an overarching theme of "Integrating Research through Strategic Goals," focus areas included Understanding and Engineering Living Systems (including the future of the Joint Genome Institute and Genomes to Life); the future of High Energy and Nuclear Physics; Soft X-Ray and Ultrafast Science; New Generations of Materials with Tailored Properties; Environmental Science for Carbon Sequestration and Subsurface Remediation; Opening a New Frontier for Scientific Computation; and Site Infrastructure and Safety for Science.

Senior management worked to strengthen operational systems for effective stewardship for the public's investments in science. In the full letter and spirit of the President's Management Agenda, more robust management practices hold managers and staff accountable for results. These practices include implementation of systems for sponsored projects tracking (RAPID) and revisions to property and procurement controls discussed in the results sections below for 1.1.a, 1.1.b., and 1.1.c. The Laboratory renewed communications that place high value on creativity, integrity, best business practices, and a safe and secure working environment. The Laboratory has taken further steps to assure the security of information, and is recognized for the quality and effectiveness of its cybersecurity monitoring program.

Planning and management activities addressed the resources for modifications to business systems accountable to the highest standards of public review. In collaboration with DOE, the strategic science goals have been reviewed and business systems have been forged to support the Under Secretary of Energy's principles for SC contracts. We seek to refine and strengthen effective roles and responsibilities of DOE and contractor personnel, their behaviors, and their expectations.

Berkeley Lab's plans continued to be integrated through the Director's Office. Coordinated through the FY-2003 Comprehensive Planning Calendar, the planning systems used at Berkeley Lab are intended to support the strategic directions identified in DOE's budget submission documents. The Director of Laboratory Planning participated in DOE workshops, and was part of the DOE HQ writing team that prepared and reviewed drafts of the SC Strategic Plan and the long-range science plans embraced by program offices and the scientific community. The Laboratory's scientific goals, outlined above, are directly complementary to the SC Strategic Plan draft. Laboratory planning systems (e.g., institutional;

operations; environment, health, and safety; facilities; and security) are intended to improve management of the Laboratory as well as to support the President's Management Agenda and the Government Performance and Results Act of 1993.

The Laboratory Director called on program area coordinators and division directors to outline strategic directions and initiatives and to engage in annual strategic planning, budget planning, and project management planning. Through these processes, division directors were delegated specific planning and development activities for DOE programs, for programs sponsored by agencies other than DOE, and for future program directions. Laboratory Institutional Plans were developed, and strategic planning meetings were organized by the Directorate offices and were coordinated through the Planning and Strategic Development Office and the Initiatives Support Group. These and other external efforts (e.g., Deputy Director's meetings with the Chief Research Officers of the other SC laboratories, and meetings of the UC Laboratory Directors and Deputy Directors) contributed to communication with DOE laboratories and a range of external constituencies.

FY 2003 Alignment and Review of Plans with DOE

During FY 2003, Berkeley Lab senior management maintained alignment of the Laboratory's research role with the Draft 2004–2008 Institutional Plan and the 20-Year Vision for the Future of Berkeley Lab. These planning documents, and other program plans and reports specify the key strategic goals the Laboratory is pursuing in support of DOE's missions.

- The Laboratory worked closely with the Office of Basic Energy Sciences on the development of nanoscience research and development and on research facilities to advance the National Nanoscience Technology Initiative.
- The Laboratory, with the Office of Advanced Scientific Computing, has presented a number of options to enable the United States to maintain a leadership position in scientific computing.
- The DOE Joint Genome Institute (JGI) is beginning a major reassessment of its capabilities for the Office of Biological and Environmental Research. The goal is to move from a specialist and focused direction supporting the sequencing of the human genome to becoming a national scientific resource. This mode of operation would support a broad range of applications of JGI technology for understanding genomes and their functions for multiple organisms.
- With the support of the Office of High Energy and Nuclear Physics, the Laboratory has continued to advance long-range plans for understanding the nature of matter and energy, including the nature of dark energy and dark matter. This includes support for scientific results now being obtained in supernova studies, at KamLAND, by the

Solenoidal Tracker at RHIC (STAR) detector at the Relativistic Heavy Ion Collider (RHIC), and the BaBar Detector for the Asymmetric B Factory.

- Berkeley Lab continues to play a key role in advancing DOE's mission to dispose of highly radioactive nuclear waste through its modeling and experimental validation of hydrology of the Yucca Mountain site.

The Laboratory has joined with DOE and the scientific community to further address space and other infrastructure needs of the growing user base as well as other facility needs. The Molecular Foundry will be a key resource for the National Nanotechnology Initiative. In addition, the Laboratory is working with SC to support dismantling the Bevatron following its illustrious scientific career. The proposed closure of the 88-Inch Cyclotron, a distinguished facility for the low-energy nuclear science community, must be accompanied by the resources for dismantling and deconstruction. The overall goal is to replace and construct new facilities identified in the Laboratory's Strategic Facilities Plan. These activities require close cooperation and collaboration with the Office of Infrastructure Management in SC, and with BSO, as well as with the UC Office of the President.

BSO participated in the annual Laboratory budget and validation reviews; the Laboratory Directed Research and Development (LDRD) Annual Plan and reviews; facility plans; environment, safety, and health plans; and other activities. The Laboratory worked with BSO day-to-day to achieve awareness of operations and results in a timely manner. General areas addressed in FY 2003 included BSO awareness and involvement in community outreach plans, Work for Others processing, ES&H self-assessment certification initiative, and management and financial audits.

Management and senior scientific staff participated in reviews and activities that define the requirements and frontier of the national research environment. Senior management personnel continued to serve as active members of, for example, the Basic Energy Sciences Advisory Committee, High Energy Physics Advisory Panel, Nuclear Science Advisory Committee, Health and Environmental Research Advisory Committee, and Energy Sciences Network (ESnet) Steering Committee. Senior management personnel also served on advisory committees for major facilities such as the Stanford Linear Accelerator Center, Advanced Photon Source, National Synchrotron Light Source, and the Spallation Neutron Source construction project.

Results of Prior Years' and Current Planning

Over the past year the Laboratory has made significant first steps in laying the groundwork for realizing many of its science goals. In particular, the Laboratory doubled the power of the NERSC Center computers from five teraflop/s peak capability to ten teraflop/s while continuing a program of

world-class science; transitioned the Joint Genome Institute to a national resource for use by multiple science agencies; moved closer to groundbreaking a state-of-the-art nanoscale scientific research facility and to major research and development (R&D) on a space-based mission for unraveling the mystery of dark energy; and formulated plans to maintain the Advanced Light Source (ALS) as the premier soft x-ray synchrotron radiation facility in the world. Current and prior years' planning, along with the review and alignment described above, contributed significantly to the following outcomes in FY 2003:

- *Design radically new generations of materials with tailored properties, including materials systems with precise electronic, structural, and optical properties.* Berkeley Lab's proposal for a Molecular Foundry to advance the SC role in the National Nanotechnology Initiative. Construction funds are included in the FY-2004 President's Request. Coupled to the nanoscience initiative is the development of a new microscope, the Transmission Electron Aberration-Corrected Microscope, which also is included in the FY-2004 President's Budget.
- *Discover the composition of the universe through particle astrophysics and the measurement of dark energy.* Berkeley Lab's international collaboration for a satellite mission, a SuperNova/Acceleration Probe (SNAP), received very strong support from DOE and other agencies. Funding of $8.4 million is included in the FY-2004 President's Request.
- *Understand and engineer living systems for Department of Energy Missions.* Berkeley Lab's efforts towards an integrated program of environmental microbiology, functional genomic measurement, and computational analysis and modeling received strong encouragement from the Office of Biological and Environmental Research. The Berkeley Lab Genomes to Life proposal also received support to establish high-throughput protein-complex characterization, functional genomics and metabolomics, and computational capabilities.
- *Enable dramatic discoveries through science-driven computer architectures.* The NERSC Center at Berkeley Lab is the foremost resource for large-scale computation within DOE's Office of Science and serves a nationwide user community of more than 2,500 scientists. In early 2003, NERSC expanded its IBM SP, named Seaborg, making it the most powerful computer in the United States for unclassified research. With 6,656 processors and a peak performance of 10 teraflop/s, Seaborg has the largest aggregate memory of any unclassified computer in the United States—7.8 terabytes (trillion bytes)—with 44 terabytes of disk storage.
- *Achieve research breakthroughs using soft x-ray and ultrafast science tools.* Berkeley Lab and the Stanford Linear Accelerator Center recently hosted a well-attended national symposium that outlined possible breakthroughs and the instrumentation that could advance the emerging science. Berkeley Lab has conducted studies and preconceptual design for a Linac-based Ultrafast X-ray Source (LUX) that would be a

powerful discovery tool for the field of ultrafast science. Berkeley Lab has successfully demonstrated the time-slicing method for producing femtosecond scale x-rays from bend magnets at the ALS. The Laboratory continued to expand the user program at the ALS, and worked with DOE to upgrade the facility to keep it at the cutting edge. The ALS is completing the construction of three new beamlines this year, expanding the end-station hours delivered to users by five percent over last year, and commissioning fully the Molecular Environmental Sciences beamline.

- *Advance inertial fusion energy (IFE) research for electric power generation through heavy-ion drivers.* The IFE science program has made consistent progress and is in the final stages of its "proof-of-concept," with four experiments exploring the physics of separate sections of the accelerator system. Last year, three of these experiments came on line, and the fourth finished construction this year. One of these, the High Current Experiment, is exploring the limits in current-carrying capability of an accelerator of intense beams and has produced promising results regarding the cost of the driver.
- *Understand global climate change and develop carbon sequestration strategies.* Berkeley Lab has implemented a coordinated suite of carbon concentration, isotope, and flux measurements in the Southern Great Plains, as part of the DOE Atmospheric Radiation Measurement Program. Simultaneously monitoring from crop fields, tall towers**,** and aircraft; this facility is possibly the best-instrumented site for regional carbon studies in the world.
- *Bevatron deconstruction.* Berkeley Lab received funding of $1.5 million, for FY 2003 and FY 2004, for the deconstruction and removal of the high-bay External Particle Beam Hall of the Bevatron.
- *Infrastructure enhancements.* The Laboratory worked closely with UC and DOE to settle on a proposal for a third-party-funded Research Support Building (Building 49) and to initiate the preconstruction design and environmental assessments.
- *Best Practices Initiative.* These are continuing efforts in Human Resources toward certification of systems; and the Project Management Office instituted tutorial sessions on project management for scientists.

In the area of business systems, the Laboratory has undertaken additional audits or reviews as part of a concerted effort to tighten up business practices and reduce risks. This includes internal audits or reviews on benefits eligibility, cost allowability, Work for Others receivables and funding, Berkeley Lab controls relative to asset control issues, procurement card assessment, and a chemical inventory system upgrade. We have put in place a new procurement card system that reduces the number of authorized users for the purchase of low-value supplies and services. We have also extended our Sensitive Property list to include a larger number of items, and are reviewing and improving our accounting systems, in particular the

capital asset accounting system. The Laboratory also responded to significant external audits on aspects of our business systems by, among others, the DOE Office of the Inspector General and the Congressional General Accounting Office.

A program for elevated levels of security against possible terrorist threats has protected Laboratory employees and infrastructure while allowing the Laboratory to remain open to students, faculty, and other visitors. The security condition level actions have been defined and posted in the Berkeley Lab Site Security Plan, and the current security condition level is included in *Today at Berkeley Lab*, distributed via email. The cybersecurity program and plans have enabled the protection of DOE assets as sustained and effective communications and information management. Berkeley Lab has remained appropriately accessible and vigilant through a real-time intrusion monitoring and blocking system developed at the Laboratory. The Laboratory has maintained a high level of dialogue with DOE on security systems.

Successes/ Shortfalls

The Laboratory has made significant progress towards its scientific plans and goals, especially support for its proposals for the Molecular Foundry and the SuperNova/Acceleration Probe (SNAP) satellite. Working with DOE, the Laboratory continues to address management and administrative issues that require further resolution. These issues include developing an agreed-upon plan for Bevatron deconstruction and taking steps to implement the plan; in particular, obtaining support for the demolition of the bay in the External Particle Beam Hall. The Laboratory continues to work with DOE to assure appropriate and cost-effective DOE oversight, including implementing a Best Practices management program.

Supporting Data

- Lawrence Berkeley National Laboratory Institutional Plans (prior years) (http://www.lbl.gov/Publications/Institutional-Plan)
- Lawrence Berkeley National Laboratory Draft Institutional Plan FY 2004–2008 (April 2003; LBID-2462)
- A 20-Year Vision: Getting a Sense of Berkeley Lab, in meeting binder from "Roundtable on the Future of Berkeley Lab"
- Agenda, "Roundtable on the Future of Berkeley Lab," May 9, 2003
- Berkeley Lab Cyber Security Web Site (http://www.lbl.gov/ICSD/security/guidelines/)
- Closeout Report, Department of Energy Review Committee Report on the Research and Development Review of the SNAP Experiment (July 9–11, 2002)
- Draft Office of Science Strategic Plan, April 2003

- Lawrence Berkeley National Laboratory Strategic Facilities Plan (June 2002) (http://fac.lbl.gov/Facilities/Planning/Publications/SFP_Rev5.pdf)
- Strategic Laboratory Missions Plan—Phase I (July 1996; see pp. 22, 68–69) (http://www.osti.gov/news/docs/summary.htm)
- Strategic Plan of the Office of Science (June 1999) (http://www.er.doe.gov/sidebar/stratpln.pdf)
- U.S. Department of Energy: Strategic Plan (September 1997) (http://www.osti.gov/portfolio/)
- Comprehensive Planning Calendar (http://www.lbl.gov/Publications/Planning/planning-calendar.html)
- Strategic Facilities Plan (http://www.lbl.gov/Workplace/Facilities/Planning/)
- Berkeley Lab Security Plan: "Site Safeguards and Security Plan for the Ernest Orlando Lawrence Berkeley National Laboratory" (Revision 3, Change 1; January 2, 2002) (http://www.lbl.gov/ehs/security/04sec_phys/SS_Plan_Title.html)
- Berkeley Lab Integrated Safeguards and Security Management (ISSM) Plan (http://www.lbl.gov/ehs/security/issm/ISSMfinal.html)

Objective #1
Criterion 1.1
Performance Measure 1.1.b

Effective Resource Management and Stewardship of Assets: *Evaluation of management's effectiveness to plan, prioritize, and manage costs, infrastructure, and staff resources consistent with DOE and Laboratory goals. Assessment focuses on performance results, which may include indicators of cost effectiveness, such as the ratio of S&T to A&O staff, representative operations support activities, and other productivity or reengineering indicators.* **(Weight = 20.0%)**

Assumption:

Weighting for Approach/Deployment and Results: A/D = 40%, R = 60%.

Gradient: See Table 1 at the end of this section.

Performance Measure Result

Overview

Berkeley Lab has developed and implemented management systems that enable decisions for effective use of the Laboratory's resources in order to safeguard the public's investments in science. Supporting the financial management and planning systems described below, Internal Audit Services (IAS) assists Laboratory senior management at all levels in assessing financial and administrative risks, and evaluating controls to address those risks.

The performance measure for FY 2003 placed particular emphasis on the Laboratory-wide management of financial resources. Other important areas of asset stewardship include Human Resources and Infrastructure Planning. Effective human resources development activities are critical to the success of Berkeley Lab's program initiatives. The Human Resources Department facilitates proactive and strategic approaches that address its strategic goals in recruitment, work climate, employee and leadership development, and continuous improvement of its systems. Stewardship of physical assets includes planning for facilities, maintenance, and space utilization. In close coordination with DOE offices, the Laboratory prepares a Strategic Facilities Plan, which describes the facilities investments necessary to sustain the Laboratory's ability to make important discoveries to advance DOE's science and technology mission. Performance and results in this area for Human Resources and for Facilities infrastructure are included and evaluated in their respective sections of Appendix F.

Other areas of asset stewardship also received significant attention by Laboratory management in FY 2003. In addition to the financial systems discussed below, improved controls have been put in place for the expenditure of funds and accountability of taxpayers' investments. Emphasis was placed on instituting new procurement and property management systems and procedures. These will be addressed in their functional areas, Sections C.6 and C.7 of Appendix F.

Systems for Resource Management and Asset Stewardship

The primary objective of resource management and asset stewardship in Operations is to support science at the Laboratory while assuring the proper utilization and disposition of public funds. The Laboratory's focus on careful monitoring of budget and spending plans, actual costs, and indirect rates was an integral part of the efficient planning and management of Laboratory resources. The Laboratory Director, Deputy Director for Operations, Financial Services Department, and senior division managers actively participated in strategic planning to provide informed decisions for effective cost control and asset and resource management. In addition to the financial systems, improved controls have been put in place for the expenditure of funds, including a new procurement and property management system. (See Appendix F sections on Procurement and Property Management.)

Forecasts for costs, budgets, rates, and project plans were also reviewed and evaluated by the Director's Action Committee (DAC), which is a vital part of the Laboratory's annual budget and planning process. In addition, DOE and BSO participated in the budget review process and approved the FY-2003 indirect rates.

The Laboratory actively supported the activities of the DOE Financial Management Systems Improvement Council (FMSIC), Federal Financial Managers Conference, DOE Accounting Officers' Conference, and the DOE Annual Budget Officers' Conference. Participation in organizations such as these enhanced the ability to communicate with other Laboratories in support of improved processes and the advancement of system development. It also provided the opportunity to examine funding and resource issues and discuss key topics such as cost reduction strategies, e-commerce, and best practices.

In addition, FMSIC directs a peer-review program to ensure the integrity of data for each report, which includes site reviews by teams from different organizations. Team members assist other DOE laboratories in their assessment of functional cost data. The Laboratory accepted an invitation from FMSIC in FY 2001 to become an active member of the Functional Support Cost peer-review team. Berkeley Lab continues to participate, represented by an employee in Financial Services.

Last year, the indirect budget was developed using a new format, Activity Based Budgeting. The objective of Activity Based Budgeting was to create a budget for each activity that supports Operations and the Laboratory, identifying the corresponding resources, value, and cost. The Activity Based Budgeting process includes budgets for general institution indirect, organization burdens, and recharge centers. Activity Based Budgeting was also used this year for the FY-2003 Indirect Budget Submission. The new format provides Laboratory senior management with necessary

documentation for more accurate planning and enhanced cost-control management. The documentation includes detailed descriptions to clarify the activities, identify the consequences of not funding the activities, and provide further information to assist in making allotments.

The annual Director's Budget Review was conducted in the third quarter. The purpose of the review is to evaluate the Laboratory's financial status and to review projects and budget requests for the following year. Financial Services organized and coordinated the review, which provided a comprehensive analysis of current-year costs versus funding, the presentation of essential initiatives and projects for the future, and spending plans for FY 2004. Participants in the review process included Laboratory senior management, division directors, and DOE representatives.

The Director's Budget Review provides senior management with key financial and resource data necessary to evaluate the impact of funding and costs projected for current and future Laboratory projects. The information presented during the review is critical to Laboratory senior management and is used by DAC for effective planning, decision support, and resource management.

The Management Report is another essential tool and is used by senior management as the primary support for sound decisions regarding funds control, budgeting, and resource management. The report is prepared by Financial Services and is typically presented as required to senior management during the second and third quarters. Last year, Financial Services significantly improved the report’s presentation by using a CD format with enhanced graphics, audio narration, and drill-down capabilities that provide additional detail.

IAS assesses financial and administrative risks and evaluates risk-management controls. An audit committee of twelve key personnel and managers from Berkeley Lab, UC, and DOE has been appointed for the purpose of communication and coordination of internal audit and related matters. The intent is to promote dialogue among a variety of participants who collectively represent the clients of IAS and stakeholders of the Laboratory. IAS schedules and hosts audit committee meetings at least three times a year. An important function of the committee is to review major reports and associated findings, and major activities and their influence on the program of regular audits.

As a consequence of improper ESnet contractor payments, which were subsequently recovered, the Laboratory has strengthened the process and signature controls for approving contract modifications and invoices. The Laboratory is further reviewing all ESnet contractual relationships as an element of a comprehensive review. These and other accountability steps are being taken to assure fiscal-responsibility performance for the stewardship of public funds.

The Institutional Plan also supports the planning process. It provides an overview of the Laboratory's mission, initiatives, resource requirements, and overall strategic plan for the next five years. Future requirements for projected staff and funding are included in the report and contribute significantly to the Laboratory's management and planning process.

The following financial systems and analysis tools were used to provide effective operational reporting and decision support:

- Financial Management System (FMS)
- Procurement/Receiving/Payables System (PRP)
- Research Administration Proposal/Project Information Database System (RAPID)
- Billing and Accounts Receivable System (BAR)
- Project Management Tracking System (PMTS)
- Janus budgeting tool

Planning, development, and implementation of systems are critical to providing timely and accurate reporting and analysis tools for optimum operations management. The FY-2003 Annual Financial Systems Plan was prepared and submitted to DOE in January 2003. The Plan summarized major projects (planned or implemented), such as RAPID and the Gelco Travel System. It outlines a plan for system enhancements and upgrades, such as the PRP System, accelerated month-end close, banking service implementation, and the Technology Transfer Database.

The Systems Plan also provides evaluations of current systems and projects, such as Berkeley Lab Information Systems (BLIS), a multi-year project for an integrated data warehouse. Another system planned for FY 2004 is ePME (Electronic Portfolio Management, Tracking and Reporting Environment), which was also evaluated. The project goal is a corporate information system that will manage, track, and report on research and development projects and integrate data from other DOE proposal and financial management systems.

Effective financial and resource management includes education and training in financial processes and systems. Continuing education is encouraged and promoted at the Laboratory. Employees are provided with ongoing training opportunities. Courses offered throughout the year include using the PRP System, performing resource adjustments, setting up a project in FMS, initiating queries to retrieve financial information, Web reporting, and the use of the Janus budgeting tool. In addition, a self-guided, Web-based course is available on the federal budget process and unallowable costs.

The Financial Network group continues to provide a format for disseminating information to the financial community. It was established through the partnership of Financial Services and Administrative Services. The Financial Network provides relevant training and guidelines for effective operational management, as well as a means in which to share information and to discuss and/or resolve timely issues related to financial management.

In FY 2003, Berkeley Lab determined that there was $76 million in unidentified, fully depreciated assets on its balance sheet. These assets involved costs, booked as fixed assets between 1987 and 1998, that had not been individually identified. Internal Audit Services has reviewed this matter, assessed the impact to financial statements, facilitated asset identification, and recommended appropriate corrective actions to Laboratory management.

Historical Trend

Institutional Indirect Rates

The Laboratory's indirect rates were consistently monitored and reviewed for accuracy and appropriateness, reflecting cost-control efforts and ensuring compliance with DOE regulations and Cost Accounting Standards (CAS). The following table represents the Laboratory's institutional indirect rates for the past five years.

Institutional Indirect Rates

FY 1999–FY 2003

	FY 1999	*FY 2000*	*FY 2001*	*FY 2002*	*FY 2003*
General and Administrative	20.5%	20.5%	19.1%	45.0%*	45.0%*
Site Support	20.0%	20.0%	19.5%**		
Payroll Burden	37.0%	36.0%	36.5%	36.5%	38.6%

** A segment of the FY 2002 indirect rate restructure and simplification process included the combination of G&A and Site Support into a composite "General Rate" of 45%.*

*** Reduction from FY 2000 due to recovery of Work for Others (WFO) Site Support rate.*

Research-to-Support-Staff Ratio

The Laboratory maintained a consistent ratio of $2.2 research labor costs for every $1.0 of support staff labor costs over the past five years. The following table illustrates historical data from FY 1999 through FY 2003:

Research to Support Staff Ratio ($)
FY 1999 - FY 2003

	FY 1999	*FY 2000*	*FY 2001*	*FY 2002*	*FY 2003**
Support	$1.0	$1.0	$1.0	$1.0	$1.0
Research	$2.2	$2.2	$2.2	$2.2	$2.2

**Projected*

Indirect Cost Efficiency

The Laboratory's total indirect costs compared to overall operating costs remained steady over the past five years. The percent of indirect versus operating costs ranged from 28.06% in FY 1999 to a projected 26.42% in FY 2003. Maintaining this stability was the result of effective cost control and resource management. The following illustrates the Laboratory's indirect costs versus operating costs from FY 1999 through FY 2003:

Indirect Cost Efficiency
FY 1999 - FY 2003

	FY 1999	*FY 2000*	*FY 2001*	*FY 2002*	*FY 2003**
Operating Costs	$325.00	$344.00	$377.50	$393.00	$399.70
Indirect Costs	$91.20	$94.00	$98.60	$103.20	$105.60
% Indirect vs. Operating	28.06%	27.33%	26.12%	26.26%	26.42%

**Projected*

Composite Labor Rates

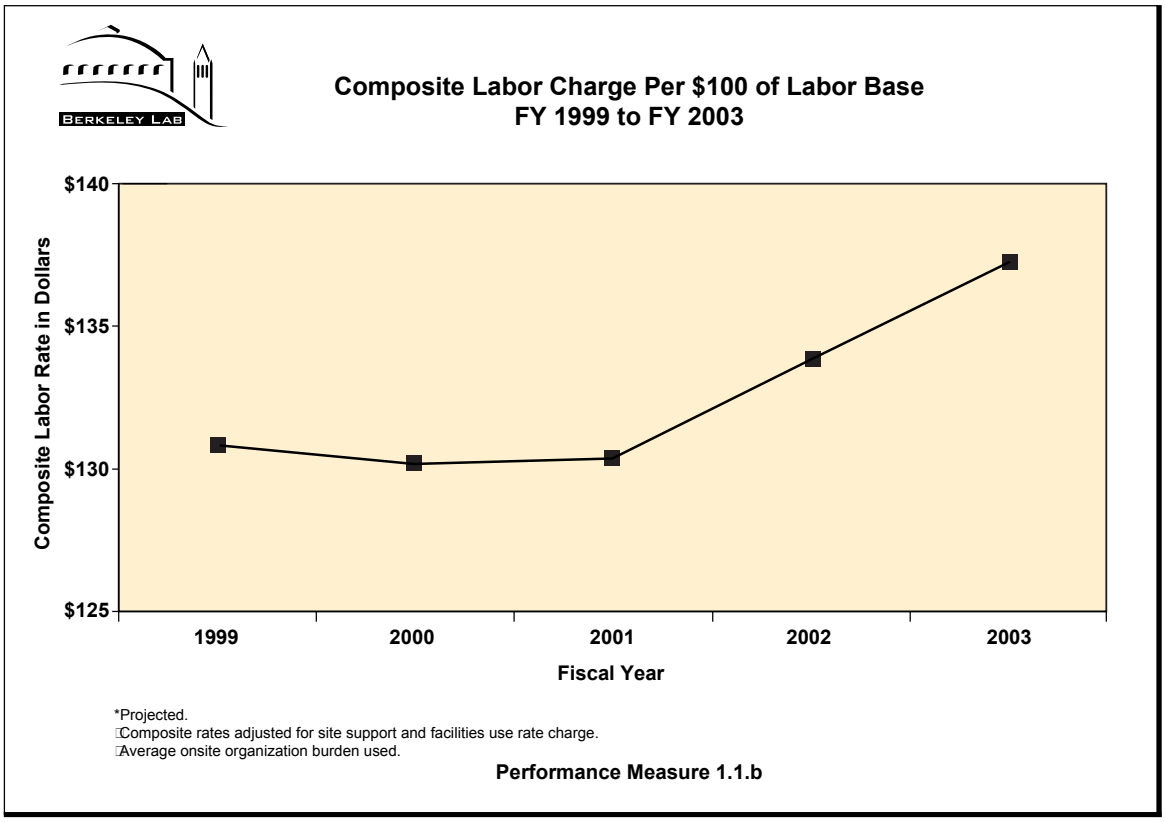
The projected composite labor rate at the Laboratory increased from last year by 2.5%, due to a 2.1% increase in the payroll-burden rate in FY 2003. The following table and chart illustrates the Laboratory's five-year trend:

Composite Labor Rates per $100 of Labor Base
FY 1999 - FY 2003

	FY 1999	*FY 2000*	*FY 2001*	*FY 2002**	*FY 2003***
	$130.99	$130.09	$130.43	$133.85	$137.26
Prior year variance	0.9%	-0.7%	0.3%	2.6%	2.5%

Historical data adjusted to reflect site support and facilities use rate changes.

**Adjusted for consistency (average onsite org burden rates used).*
*** Projected*



Historical Trends Analysis

The overall historical data relating to indirect costs, as represented by the Institutional Indirect Rates, Research-to-Support Staff Ratio, Indirect Cost Efficiency, and Composite Labor Rates, show a recent steady or slowly increasing trend (since 2001). Not represented in these summary quantitative numbers is a continuing and vigilant effort by Laboratory management to control such costs. However, there have been significant indirect cost drivers over which the Laboratory has had little or no control, and some increases were deliberately made for responsible management

stewardship. The key mechanisms for maintaining control on these rates have been reductions in staff, postponement of acquisitions, and reduction in some discretionary budgets.

In the case of the Institutional Indirect Rates, specific cost drivers have resulted in a sustained increase in each of the last three years. For example, between FY 2000 and FY 2001, there was a 16% increase in Facilities costs, half of which was due to increased utility costs at the time of the California energy "crisis" ($3 million to $4.7 million). Between FY 2001 and FY 2002, cost for administrative services increased 19%, due largely to responses to new DOE travel regulations. For stronger management stewardship, the Directorate budget increased to include division director salaries and an increased Laboratory Directed Research and Development budget. Costs for Environment, Health and Safety jumped 25% from FY 2002 to FY 2003 (projected), due largely to a new requirement that waste management had to be paid from Laboratory overhead rather than through direct funding. These five areas represent 66% of the total projected FY 2003 indirect budget ($69 million of $104.5 million). Managing such cost drivers makes maintaining a nearly flat (slightly increased) overhead rate a major accomplishment. The increases due to unfunded mandates and other added requirements make the maintenance of a flat Research to Support Staff Ratio a noteworthy accomplishment as well.

The major drivers for the composite labor rate have been steadily increasing components in the "payroll burden" (fringe benefits). Over the past three years (FY 2000 to FY 2003, projected), healthcare-related cost increases included an Old Age Survivor and Disability Insurance increase of 41%, a health-plan increase of 36%, an annuitant's health-cost increase of 112%, and Medicare increase of 32%. These four areas, relatively inflexible to management decisions, represent 48% of the total projected FY 2003 payroll burden ($33.8 million of $70.7 million); their cumulative increase is 48%. Responsible management stewardship limited the Composite Labor Rate increase to 5.5%. Combined with the overhead cost drivers, maintaining a nearly flat Indirect Cost Efficiency ratio is a notable accomplishment.

Highlights for FY 2003

Berkeley Lab continued its close involvement and coordination of system improvements with the DOE Financial Management Systems Improvement Council and other federal and DOE conferences. As a partial response to current directions, an example of a major business system currently under development is the Integrated Management Navigation System (I-Manage). This is a DOE project that supports managerial cost accounting and the integration of budget reporting and execution. Another system planned for implementation is the Standard Accounting and Reporting System (STARS), a DOE financial management system that will be the foundation

for linking budget formulation, budget execution, financial accounting, financial reporting, cost accounting, and performance measurement.

The Functional Support Cost Report is a comprehensive document prepared annually for DOE that reflects Laboratory costs by functional activity in support of their direct mission. For the first time this year, DOE auditors reviewed the Laboratory's Functional Support Cost Report during their validation process. The Laboratory, the first in the DOE System to be reviewed, was commended for the professional and well-organized manner in which the materials were presented. There were no significant findings.

The Management Report continued with improvements to increase information in a succinct and user-friendly environment. Additional enhancements this year included Recovery by Division graphics and Operations Division and Department Head forecasts. The Management Report is well received and continues to be a critical part of effective financial management at the Laboratory.

Process efficiencies and the utilization of system technology provided the Laboratory with the necessary tools for successful resource management, operational effectiveness, and cost reduction. For example, the use of the PRP System streamlined vendor disbursement payments and procurement processing. PRP combines three processes into one integrated system, managing purchasing, receivables, and payables. In addition, the implementation of sound accounting practices and financial stewardship supported the Laboratory's ability to effectively manage its resources.

Electronic Data Interchange (EDI) is another current cost-reduction activity that is being pursued at the Laboratory. High-volume vendors are continuously sought and tested for implementation. EDI provides the capability of considerably decreasing the number of invoices processed, resulting in the effective management of resources.

As discussed above in Historical Trends Analysis, the Laboratory has responded in numerous ways to external drivers of increased costs. Strong management actions have minimized the financial impact of such drivers on the Laboratory's scientific productivity in support of DOE and other sponsors' missions.

Successes/ Shortfalls

The Laboratory continued to effectively manage funding and resources in support of its goal to conduct quality research and development. Several systems and reporting tools were used to provide essential information to senior management for strategic planning and informed decision making. The PRP System, for example, has provided a streamlined method for processing procurements, receivables, and payables, and integrates quality controls and efficient operations.

The Management Report continued to be an effective tool that provides key financial data for planning, prioritizing, and managing infrastructure, staff resources, and costs consistent with DOE and Laboratory goals.

The Laboratory has participated in several organizations that support improved systems and processes, and continues to plan and develop new systems and technology for improved reporting and analysis.

Continued education and training is an important part of utilizing current tools and technology. The Laboratory provided employees training opportunities in areas such as using the Financial Management System and the PRP System. The Financial Network is another platform in which key information is shared and timely issues are discussed.

Key indicators of effective performance include the ratio of science and technology labor costs to administrative and operational staff labor costs. The projected ratio of research to support staff costs was maintained at the level of $2.2 for the past five years. Other performance indicators included the total indirect costs as a percentage of total operating costs. Through effective controls and resource management, Laboratory Operations has maintained a stable cost ratio for the past five years.

Institutional indirect rates were consistently reviewed and managed. Overall, the rates have remained steady over the past five years. The payroll burden rate increased from last year, while the general rate, G&A and site support, remained unchanged.

Internal audits and reviews are under way, and new procedures will be implemented for procurement and invoicing to improve Laboratory stewardship of the public funds.

Supporting Data

- Appendix F Performance Measures for Financial Management FY 2003
- Lawrence Berkeley National Laboratory Draft Institutional Plan FY 2004–2008 (May 2003)
- Lawrence Berkeley National Laboratory Indirect Rates FY 1999–2003

- Lawrence Berkeley National Laboratory Composite Labor Rates FY 1999–2003
- LBNL Institutional Indirect Budgets by Year, table FY 1999–2003
- LBNL Payroll Burden Costs, table FY 1999–2003

Objective #1
Criterion 1.1
Performance Measure 1.1.c

Research Support from Other Sponsors: *Evaluation of management's effectiveness in fostering non-DOE-sponsored work and collaborations that benefit from the unique research competencies and scientific facilities of the Laboratory build upon and complement DOE's mission, and advance the nation's scientific and economic interests. The assessment focuses on the planning and management of non-DOE-sponsored research, institutional resources to enable externally sponsored work, and the coordination with DOE.* **(Weight = 20.0%)**

Assumption:

Weighting for Approach/Deployment and Results: A/D = 40%, R = 60%.

Gradient: See Table 1 at the end of this section.

Performance Measure Result

General Trends for Research

Strategy to Serve as a National Scientific Resource

As a DOE National Laboratory, Berkeley Lab's research supports DOE's mission and serves the national interest as a scientific resource. The Laboratory plans for, and conducts, research that builds upon its core strengths. The Laboratory's strategic vision, as discussed at the senior management roundtable with Office of Science leadership is outlined in the 20-Year Vision. This vision is to create and sustain value from our program diversity, moving from a multiprogram organization of excellent independent efforts to program "interdependence." To this end the Laboratory fosters science supported by a range of sponsors, building capabilities and supporting our national scientific role. As described in Section 1.1a., central to Berkeley Lab's vision is advancing science along key scientific frontiers: matter and energy in the universe, quantitative biology, nanoscience, x-ray-based science, scientific discovery through advanced computing, and energy technologies and environmental solutions. Our strategy for serving as a national scientific resource supports these key directions. Laboratory senior management and scientific division leadership select research supported by other sponsors that contribute to these key areas and builds the Laboratory's underlying competencies.

Consistent with our strategic goals and in support of DOE's mission and consistent with its policies, Berkeley Lab has many unique facilities and scientific resources that are made available to other government agencies, universities, and industry. The Laboratory's DOE mission areas that hold the strongest interest for collaboration by other organizations include Biological and Environmental Research, Basic Energy Sciences, Energy Efficiency and Renewable Energy, and in the future, High Energy and Nuclear Physics. In the immediate future, the proportion of support from non-DOE sources is planned to remain approximately level at 20 percent of the research effort. However, as the use of the Laboratory's national

scientific facilities expands and the diversity of sponsors aligned with our strategic goals grows, the proportion of non-DOE research may increase to 25 percent or more of the total Laboratory budget. This growth is consistent with DOE's interest in full access and utilization of the Laboratory's unique capabilities.

Management Highlights in Support of Work for Other Sponsors

Berkeley Lab continued management and planning efforts to strengthen its research service and scientific activities in support of federal agencies and local governments. The Laboratory established an Office of Homeland Security whose directive is to raise the level of participation and research planning in support of the Department of Homeland Security (DHS). The Laboratory hosted DHS research leadership and engaged in planning meetings with key DHS staff. In addition, the staff of the Laboratory's Office of Homeland Security met with other defense and security agencies to assure that the Laboratory's expertise and research outcomes can be fully utilized to address the nation's security needs. The homeland security contact information was communicated with the Office of Science leadership.

To further develop Berkeley Lab's long-term strategy for full development of biological sciences research capabilities and to serve that nation's interest in improved health, Berkeley Lab recruited a Life Sciences Division (LSD) Director, who has a joint appointment with the University of California at San Francisco, one of the nation's leading medical schools. The Office of Science was involved in discussions regarding the appointment. The new Director will enhance efforts that integrate the research capabilities developed by the Office of Biological and Environmental Research to serve the National Institutes of Health. The new leadership is focusing on quantitative systems biology, which should offer great insight into how cells and organisms function and how disease processes are manifested and potentially controlled. This focus area was addressed with Office of Science leadership during the Roundtable on the 20-Year Vision of Berkeley Lab.

As indicated in the section on Work for Others (WFO) Development Trends, Laboratory division leadership and senior management work with targeted federal agencies to best advance science and utilize the Laboratory's capabilities for the national interest. Management's key efforts were directed towards strengthening relationships with NASA and NASA Laboratories, with the Department of Homeland Security, and with the National Institutes of Health. Division leadership and Laboratory management also supported the growth of ties to universities and industry for nanoscience research, and supported energy research that assists the state and industry, including the North American Electric Reliability Council.

The Laboratory is further strengthening its ties to a broader range of campuses, beyond its historic ties to the University of California at Berkeley. Laboratory planners have analyzed the growth in ties to other campuses and are specifically examining ways to expand academic ties in areas such as nanoscience, astrophysics, biological science, and homeland security research. These efforts may contribute to further WFO growth from academic institutions in the future.

To assure effective and efficient administrative support for Berkeley Lab's national research strategy and for proposal submission to other sponsors, Berkeley Lab has further developed the Sponsored Projects Office, whose manager reports to the Laboratory's Chief Financial Officer. The Sponsored Projects Office is structured around supporting specific scientific divisions. A Sponsored Projects Office contracts officer is assigned to support one or more divisions to assist with all types of agreements such as CRADAs, WFO, and User Agreements. This ensures one point of contact, regardless of the type of agreement or type of sponsor, and provides one point of contact for a Principle Investigator's (PI) administrative needs. In further support of WFO, the Administrative Services Department provides the PI with proposal preparation, cost monitoring and post award administration services. The Technology Transfer and Patent Departments provide support in licensing and patenting resultant technologies. The Financial Services Department supports DOE contract modifications (funds received), billing, and accounts receivable functions needed for the financial management of non-DOE work. These Departments worked to provide a constructive relationship with sponsors and to coordinate information with BSO and for DOE HQ.

Berkeley Lab's implementation of the PeopleSoft Grants Management research administration module, Research Administration Proposal/Project Information Database (RAPID) is an important business-systems accomplishment. The system was designed to meet Berkeley Lab's continued increase in, and reliance on, sponsored research activities and was also designed to meet the needs of Laboratory scientists, managers, and support staff. RAPID went live in May 2003. We are the first government institution and first DOE laboratory to succeed in implementing the Grants Management System. By doing so, we have further modernized and integrated our institutional information systems. In addition, we have shut down our legacy SPPT system, saving approximately $11,000 per month in license costs through elimination of the costly FOCUS programming language and outsourced mainframe host. RAPID is seamlessly integrated with other PeopleSoft enterprise systems, such as financial management and human resources.

RAPID has provided Principle Investigators and support staff with an Award Management Report which, for the first time, provides real-time financial information to help manage non-DOE projects. Information includes award values, costs, and cash-management information on one

panel, accessible in RAPID and in the Berkeley Lab data warehouse on the internet. RAPID also provides, for the first time, user access to sponsored research data. RAPID allows PIs and support staff the on-line ability to query for sponsor and funding information and can provide various institutional rollup data for management's use.

To enhance the cross-functional efficiency of Laboratory departments supporting WFO, a cross-functional SPO/RAPID users group was formed. Members from the scientific divisions and SPO met to discuss RAPID implementation and general WFO issues. Minutes were published and distributed. This forum will serve as an educational forum in FY 2004 and presentations on WFO topics will be on future agendas.

SPO has continued with the many internal and external efficiencies realized during the previous year. This includes a delegation from DOE to sign standard non-federal Work for Other agreements. All internal forms and standard contracts are on the SPO website, which offers easy accessibility. SPO scans all awards and distributes them to the scientific division (PI and support staff) along with Accounting and Budget personnel in FSD to speed up distribution of important documents. DOE has continued its policy of allowing SPO to send proposals to sponsors without DOE approval. Approval is only needed prior to acceptance of the award. This process has eliminated the DOE review of over 200 unfunded proposals a year.

This year Berkeley Lab has partnered with DOE to achieve further efficiencies. For example, proposals are emailed to the BSO and DOE/OAK at the same time, eliminating delays in receipt of proposals. DOE provides Berkeley Lab with email approvals of both proposals and waivers of federal administrative charge. This has eliminated unnecessary paperwork and delays. Another accomplishment is that Berkeley Lab was asked by the DOE Contracting Officer to review some of its "best practices" with DOE and Livermore Lab. As a result, Livermore Lab adopted some of Berkeley Lab's best practices in order to streamline its WFO process.

Non-DOE work increased to approximately $95 million in FY 2002 (as receivables rather than costs) and is estimated to be $103 million for this fiscal year. In 2002, there were almost 600 proposal actions, and as of the third quarter of 2003, we have approximately the same number of proposals. Berkeley Lab became the contracting office of the Virtual National Laboratory (VNL) to research and develop the extreme ultraviolet lithography (EUVL) (Tri lab) CRADA and is the contracting office for the follow-on VNL WFO agreements with SEMATECH.

Work for Others (WFO) Management Results

The Advanced Light Source (ALS) is expected to increase its user base from over 1,400 users this year to about 1,700 by 2004. Concomitant with this increase is support in structural biology and x-ray crystallography from

the National Institutes of Health (NIH) and from private sources, such as the Howard Hughes Medical Institute. Much of this effort is aligned with strategic Laboratory goals in nanoscience and quantitative biology. The Laboratory has a major user support organization to facilitate access and investments in ALS beamlines.

The responsibility for national welfare that now resides in the Department of Homeland Security depends on advanced technology and on the underlying capabilities of fundamental and applied science to support homeland security. The Office of Science and other DOE departments, including the Office of Energy Efficiency and Renewable Energy, support research that is essential for the nation's need to detect, prevent, and respond to terrorist attacks involving chemical, biological, and radiological threats. Further support of this research can potentially impact a broad set of technology needs, providing significant return on research investments. The Laboratory has designated a contact person for homeland security activities to foster access and sponsorship from the Department of Homeland Security. Several efforts are underway to promote research for homeland security. First, the Laboratory is pursuing an integrated analysis capability to assess the vulnerabilities and connectivities important to critical infrastructures in order to identify a suite of technologies for threat reduction and consequence mitigation. Second, the Laboratory is supporting local organizations so that the needs of local stakeholders and groups in municipalities will have impact on technology development. Some of the science Berkeley Lab offers for this national need are in the fields of aerosol transport modeling, compact neutron sources, environmental characterization, forensics and analysis, structural biology, information technology, infrastructure protection, and ultrasensitive detectors.

Other sponsors of sequencing, functional genomics, and computational biology have an increasing interest in the Office of Biological and Environmental Research capabilities associated with the genome program at Berkeley Lab and the DOE Joint Genome Institute, and the modeling capabilities of the Physical Biosciences Division. Primary sources include the NIH, U.S. Department of Agriculture, U.S. Environmental Protection Agency (EPA), the National Science Foundation, and the Defense Advanced Research Projects Agency (DARPA). The Laboratory, in partnership with the University of California at Berkeley, has completed the sequencing and annotation of the euchromatic genome of *Drosophila melanogaster*. The Laboratory has been in discussion with the Office of Biological and Environmental Research to improve the strategic access by other sponsors to this national sequencing resource.

The Laboratory's internationally recognized programs in cell and molecular biology are attracting support from biotechnology companies as well as from NIH and the Department of Defense (DOD) (for breast cancer, prostate cancer, and DNA repair studies). The Laboratory's new leadership

in the Life Sciences Division builds on strengths and relationships to foster relationships with the (NIH) and other biological science sponsors, as outlined in the Laboratory's 20-Year Vision.

Research in materials sciences that takes advantage of the capabilities at the Advanced Light Source, the National Center for Electron Microscopy, and the Center for X-Ray Optics is sponsored by other agencies. Primary sponsors are DARPA and private industry. Cooperative Research and Development Agreements (CRADAs) for this work are tabulated separately from Work for Others. These efforts directly support the Laboratory's goals in nanoscience.

EPA and the State of California are sponsoring research that builds on Berkeley Lab's experimental facilities and expertise in the buildings and electricity reliability areas. These efforts directly support the Laboratory's goals in energy technologies and environmental solutions.

In the area of high energy physics, the Laboratory is working with DOE, the National Science Foundation (NSF), and the National Aeronautics and Space Administration (NASA) to develop and implement a SuperNova/Acceleration Probe. Although most of the funding to the Laboratory is expected to come from DOE, there is the potential for additional NSF and NASA funds. The Laboratory's senior management has held high-level meetings with DOE and NASA officials to advance the success of this strategic science area.

In support of DOE missions, Berkeley Lab conducts research in partnership with universities and international organizations where its unique expertise or facilities are of specific value to such collaborations. The projects are in many fields, including physics, chemistry, materials sciences, geosciences, and biology. In addition to the research projects, Berkeley Lab science education activities are conducted in partnership with the University of California (UC) and the State of California. The Laboratory has broadened its joint faculty appointments at senior management levels to foster this university association.

The sponsors for Berkeley Lab's strategic scientific capabilities and the associated areas of research that complement DOE's mission areas are described in detail in the Draft Institutional Plan FY 2004—FY 2008, Section III, Laboratory Strategic Plan. The levels of funding provided by these agencies are in Section VIII, Resource Projections and Tables, of the same document.

Successes/ Shortfalls

Berkeley Lab maintains one of the more extensive and diversified portfolios of sponsored projects in the DOE national laboratory system.

Implementation of the PeopleSoft Grants Management module makes Berkeley Lab a leader in modernizing and integrating institutional systems, as well as achieving significant cost savings through retiring the legacy system.

Supporting Data

- Lawrence Berkeley National Laboratory Institutional Plan FY 2003–2007 (December 2002) (http://www.lbl.gov/Publications/Institutional-Plan/2003/IP2003.pdf)
- Lawrence Berkeley National Laboratory Draft Institutional Plan FY 2004–2008 (May 2003)
- Award Management Report for RAPID in IRIS (http://www.iris.lbl.gov)

Objective #1
Criterion 1.1
Performance Measure 1.1.d

Community Relations and Science Education: *Evaluation of management's approach and effectiveness in strengthening relationships with the community and in advancing science education related to Laboratory programs. The assessment focuses on management's effectiveness in addressing community issues in a proactive manner and the successful implementation of science education programs.* **(Weight = 20.0%)**

Assumption:

Weighting for Approach/Deployment and Results: A/D = 40%, R = 60%.

Gradient: See Table 1 at the end of this section.

Performance Measure Result

Community Relations Organization and Planning

In FY 2003, the Laboratory Director took an active role in community relations, meeting with local government officials hosting community forums to address Laboratory/community relations. The Director delegates the general management of community relations and science education to the Head of Public Affairs. This position reports to the Deputy Director for Operations, assuring close coupling of Public Affairs with all operations and administrative activities, as well as maintaining its visibility and access as an element of the Directorate. The Community Relations Plan identifies programs and community service activities for Laboratory managers' participation, and highlights the value of participation in various community organizations. Laboratory Management has enhanced the value of community service through an ongoing review of employee performance-evaluation criteria to include community service.

This marked the first full year for the Public Affairs Department. The Department includes the Government and Community Relations Office, the Communications Department, and the Center for Science and Engineering Education (CSEE). The Head of Public Affairs reports to the Deputy Director for Operations, and works closely with the Director. The Head of Public Affairs serves as a member of the Director's Action Committee (DAC), which meets weekly, and attends the monthly Division Directors' meeting. He also participates, as a member of the Operations senior management team, in weekly meetings of the Operations leaders with the Deputy Director for Operations. This ensures that Public Affairs issues and concerns are taken into consideration at the highest level of Laboratory management.

The Head of Public Affairs holds weekly Public Affairs Council meetings with leaders of the three Public Affairs units. The group works to develop internal and external relations strategies, and reviews the implementation of

programs to raise awareness of the Laboratory and its accomplishments in the local community. It is also responsible for identifying and developing opportunities for the Laboratory to increase its contribution to the local community. The inclusion of CSEE in Public Affairs ensures that the Laboratory's contributions to local educational efforts remain a high priority with senior management. The weekly meetings also serve to provide the Head of Public Affairs with the management and programmatic information he needs to inform senior management of these activities.

Berkeley Lab's CSEE is a leader in the DOE national laboratory system in leveraging the unique capabilities of a national laboratory with the educational advancement of the next generation of scientists and engineers. CSEE develops, implements, and evaluates programs that utilize the resources of the Laboratory to improve the quality of mathematics, science, and technology education. These include projects and activities for public science and technology literacy, precollege (K to 12) to community college, undergraduate, and graduate education. CSEE also offers research fellowships to undergraduate students through a number of DOE-sponsored programs, including the Science Undergraduate Laboratory Internship (SULI); the Community College Initiative (CCI); the Pre-Service Teacher Program (PST); and, in partnership with NSF, the Faculty and Student Teams (FaST) program.

CSEE sponsors summer undergraduate interns, high-school interns, and science teachers for curriculum training and development. Additionally, the Laboratory continued its support of the biotechnician training program of Berkeley Biotechnology Education, Inc. (BBEI), with six interns annually in the East Bay. The Laboratory also had representation and leadership at the Chabot Space and Science Center, BBEI, numerous parent-teacher-student associations, and educational nonprofit groups.

Laboratory Management involvement in community activities included participation on local boards and commissions, educational organizations, Chambers of Commerce, community foundations, and environmental groups, as well as service clubs. It also endorsed enhanced communication with community groups through the wider distribution of Laboratory news; a community newsletter, *Science on the Hill*; an active speakers' bureau; and the Community Relations/Science Education outreach program, Berkeley Lab Friends of Science. The Public Affairs Office continued its expanded role as liaison to key stakeholders in the local and regional community.

The Laboratory's Summer Lecture Series is broadcast to the community via Berkeley Community Media on a local-access cable channel. The broadcast programs of this series accomplish one of management's main objectives: promotion of the Laboratory's scientific mission and accomplishments in local communities. During each year, 15 programs appear six times each over a two-week period.

The Deputy Director for Operations represents the Laboratory on the Hills Emergency Forum (HEF), a regional body established after the 1991 East Bay firestorm. Through this entity and its Vegetation Management Consortium, Berkeley Lab initiated and regularly updates vegetation management protocols that set the standard for regional practices in fire-risk reduction.

Highlights for FY 2003

During the past year, the Laboratory took the following strategic actions to strengthen our relationship with the local community, and to advance our science education activities.

- In October 2002, the Laboratory hosted its most successful Open House. Over 8,000 neighbors came to visit the Laboratory and learn more about its programs and activities. Discussions are underway for the next Open House, tentatively scheduled for October 2004.

- In October 2002 the Laboratory also hosted, for its employees, a mayoral debate between the two candidates running for Mayor of Berkeley. When compared to a similar event four years earlier, this debate found the candidates vying for who could be the most supportive of Berkeley Lab. This is a significant change in attitude and is reflective of the overall improvement in the relationship between the Laboratory and elected city officials.

- With the election of a new Berkeley Mayor in November 2003, the Laboratory sought to use this opportunity to elevate and strengthen City-Laboratory relationships. The Director and the Head of Public Affairs have a quarterly lunch meeting with the Mayor and his Chief of Staff to discuss any issues the City might have with the Laboratory, and to see where the Laboratory can be of assistance to the City. These discussions have been positive, and have resulted in the exploration of new initiatives in education and environmental remediation between the City and the Laboratory.

- This year marked the first full year of *Science on the Hill*, a new quarterly publication designed to inform neighbors and interested community members about the Laboratory. The September 2002 issue, which was dedicated to the Open House, was mailed to all Berkeley residents for the first time; this was a major factor in the record turnout for the Open House. Results from a survey of *Science on the Hill* readers were so positive that it was decided to mail all future issues to Berkeley residents.

- The Laboratory Director hosted the first Laboratory-neighbors conversation in May 2003. The effort was designed to inform the community about the upcoming Molecular Foundry project, as well as other research and projects at the Laboratory. Over 100 people attended,

including the Mayor, who thought it was a successful meeting. Plans are underway to hold similar meetings with the community in the future.

- The Laboratory continues to expand its Friends of Science program. This past year there were seven lectures; over 100 attendees were at a special pre-opening breakfast at the Open House; and the ongoing mailing list has grown to over 250 members.

- The Laboratory has worked hard to prevent any community or civic concern associated with the removal of excess material from Building. 51 (Bevatron). Letters to the City of Berkeley and North Richmond staff, appearances at city councils and commissions, and quick turnaround on requests for information contributed to a diminished level of concern, no negative response from elected officials, and the avoidance of a threatened lawsuit.

- The Laboratory continues to provide public tours, averaging five per month, and arranged over 25 talks, presentations, and speeches by scientific staff to local community members.

- A major effort was undertaken to work more closely with the Berkeley Unified School District. Activities under this umbrella include school tours, high-school-student research participation, and hosting meetings with middle- and high-school science teachers.

- CSEE began a school tour program, with the addition of a half-time retired Oakland science teacher. The emphasis has been on tours for students from surrounding school districts (Berkeley, Oakland, West Contra Costa County).

- CSEE initiated a year-round Careers in Science and Technology program that provides speakers from Berkeley Lab and careers in science to middle and high schools. Several thousand students have participated in the program, which includes a hands-on activity used by Office of Science Director Orbach at a recent National Science Teachers Association meeting.

- The Laboratory expanded its Pre-Service Teacher Program to 16 students (future teachers) and created a model two-week professional-development activity for teachers.

- The Laboratory is hosting the largest number of visiting faculty/student teams (FaST) of any DOE national laboratory.

- The Laboratory has grown its high-school research participation program from 16 to over 40 participants, with the majority of the students coming from the closest communities (Berkeley, Oakland, West Contra Costa County).

Successes/ Shortfalls

The new public affairs organization had its first year of expanding Berkeley Lab's interactions with key stakeholders in the local and regional community.

Laboratory representatives enhanced local community awareness of Berkeley Lab through participation in over 85 boards, councils, and commissions. The Laboratory continued increased distribution of its biweekly internal publication, *Currents*, to nearly 100 community leaders, and distributed the community newsletter, *Science on the Hill*, to over 1,600 community leaders and members.

The Laboratory sponsored public Hills Emergency Forum meetings, distributed fire-reduction materials to community groups and leaders, and gave scientific seminars on the Laboratory's fire-risk-reduction programs at a related conference.

Berkeley Lab was actively involved in community endeavors to improve science education at all grade levels, with focused partnerships in several local school districts.

Supporting Data

- Friends of Science brochure, Web site, flyers for lectures, sample e-mail list (http://www.lbl.gov/friendsofscience/)
- Community newsletters
- Open House flyers
- Sample listing of Laboratory employees in community service
- CSEE Summer High School Student Program highlights
- Tours Tracking Report
- Hills Emergency Forum 10th Anniversary Conference program and Vegetation Almanac cover
- Center for Science and Engineering Education Web site (http://www.lbl.gov/Education/CSEE/)

Objective #1
Criterion 1.1
Performance Measure 1.1.e

Diversity Leadership and Awareness: *Evaluation of senior management's effectiveness in increasing the awareness of diversity in all divisions of the Laboratory. The assessment focuses on the development and implementation of divisional diversity plans and their innovative actions to enhance the work environment for all employees and to engage in proactive methods of diversity outreach and recruitment designed to promote equality of opportunity.*
(Weight = 20.0%)

Assumption:

Weighting for Approach/Deployment and Results: A/D = 40%, R = 60%.

Gradient: See Table 1 at the end of this section.

Performance Measure Result

Diversity Management Implementation

Berkeley Lab has set general goals for diversity-management implementation: (1) the establishment of division diversity action plans that address each division's or department's needs and concerns; and (2) the publication of finalized plans on the Web, which makes them accessible to all Laboratory employees, as well as to the general public. For FY 2003 a new Best Practices Diversity Council (BPDC) has also been established to leverage successful practices throughout Berkeley Lab.

As a result of senior management's commitment to diversity and follow-through by division managers, the Laboratory now has a more pervasive diversity best-practices model. The following principles for this best-practices model have been developed and refined:

- Manifest management commitment and accountability.
- Highlight diversity practices that are priorities for accomplishing Laboratory results.
- Promote equal-employment opportunity, and address one or more barriers that adversely affect equal-employment opportunity.
- Promote fairness and produce noteworthy results.
- Ensure communication between management and staff.

Now in its third year of implementation, diversity best practices are evident in Laboratory divisions' diversity action plans for FY 2003, and in the activities of all levels of management and staff who are now involved in diversity awareness, equal-opportunity building, recruitment, and in making Berkeley Lab a research organization that is welcoming and productive for all employees.

In FY 2003, the Laboratory has further advanced its commitment to diversity by establishing the Best BPDC. The Laboratory established the BPDC to provide a forum for senior management to leverage diversity best practices around each division's various initiatives and programs, and to inform and integrate diversity activities across divisions. Each division director appointed a representative, someone who is actively involved in developing the divisional diversity plan, to the BPDC. The Council will also ensure that the Laboratory's diversity activities continue to be in alignment with top diversity best-practices organizations whose leadership demonstrates a strong commitment to inclusionary practices.

The functional objectives of the Council include the following activities:

- Create synergy between division/department diversity action plans and initiatives.
- Develop a diversity best-practices framework, and extend best-practices models across the Laboratory.
- Mentor new initiatives.
- Visibly recognize and communicate diversity best-practices achievement throughout the Laboratory.
- Identify and address emerging issues.
- Welcome the views of outside speakers.
- Develop a Lab-wide diversity scorecard.

The BPDC Chair also participates in diversity planning by involvement in the Director's review of each division's annual diversity plan and its implementation. These annual reviews are presented by division directors and include presentation of diversity statistics, hiring actions and progress, a review of actions made, and the steps to be taken next year. In addition to the Director and the Chair of the BPDC, participants in the review include the Laboratory Deputy Directors, the Director of Planning and Strategic Development, the Head of the Workforce Diversity Office, and the several division directors of the areas being reviewed (e.g., Physical Sciences, General Sciences, Life Sciences, Computing Sciences, and Energy Sciences). During these reviews, critiques are made by the participants and recommendations are made to the divisions' plans, including suggested approaches to extend the most successful programs across the Laboratory.

The division diversity plans, which are largely focused on recruitment and retention practices, can be found on the Berkeley Lab Web site at http://www.lbl.gov/Workplace/WFDAP/. The Director expects the Council to raise the Laboratory's level of performance in terms of "moving the process of finding promising ideas into the organization."

Diversity Action Highlights for FY 2003

The Laboratory's first year of managing workforce diversity required, and received in the forms of diversity action planning and follow-through, management's leadership and accountability. As the Laboratory approaches its fourth year of implementing division workforce diversity plans, it is now expected that each year, all divisions will continue to update and improve diversity action plans that address "two main elements" as defined by Director Shank: (1) "innovative actions to enhance the work environment for all employees," and (2) "methods of assuring hiring pools that are as diverse as possible."

In FY 2003, divisions have continued to raise the Laboratory's level of diversity performance to the best industry standards. The following activities are notable FY-2003 diversity achievements:

- To improve the workplace environment and advance the professional interests of employees, the Laboratory has moved to a 100% tuition-reimbursement program. This employee advancement program is in its second year, and has resulted in significant increased educational resource use and educational development for employees, moving from $99,000 in tuition in 2002, to $154,000 in 2003, and to an estimated $317,000 in 2003.
- The Laboratory continues to support minority national science associations and UC Berkeley minority graduate recruitment efforts, such as the Berkeley Edge Program and Conference. The Berkeley Edge Program is a UC Berkeley recruitment, retention, and advancement program for traditionally underrepresented minority graduate students in science, mathematics, and engineering. Diversity plans of the Chemical Sciences and Engineering Divisions describe their involvement in the Berkeley Edge Conference, which is designed to encourage underrepresented minority students who are competitively eligible for UC Berkeley's Ph.D. programs to apply to the University.
- School-to-Career internships and Laboratory mentorships in biotechnology and other science areas and engineering have nearly doubled to 46 participants. This growth was accomplished by division leadership who recruited scientists as mentors and made division resources available.
- In their diversity plans for calendar years 2002 and 2003, many divisions continue to cite impressive efforts toward diversity outreach and student internships relative to increasing diversity in our science and engineering workforce. As one example, Computing Sciences identified notable accomplishments in the areas of electronic advertising and minority recruitment, school-to-career placements, targeted colleges and universities for recruitment and minority applicants, and professional development opportunities for Information Technology faculty from local community colleges and high schools.

The hands-on training is ongoing. The specifics for this and all other divisions are available on the Web sites for individual Workforce Diversity Action Plans (see the list of Supporting Documents for the URL), each of which gives prior accomplishments and the updated goals for FY 2003.

- The Earth Sciences Division established a course on verbal communication for scientists and support staff whose native language is not English. About 20 staff members participated in the course and rated it as excellent.
- As part of its Diversity Plan for 2003, General Sciences has included education and public outreach/recruitment efforts. One notable action involves Faculty/Student Research Teams (FaST), a program that establishes research partnerships between faculty from minority-serving colleges and universities, and Laboratory investigators. Students recommended by faculty members participating in FaST spend most of their 10-to-15-week Berkeley Lab appointment working on research assignments under the direction of both the participating faculty member and Berkeley Lab investigator.

The Berkeley Lab workforce has driven the success of Laboratory science, and the Laboratory's reputation for scientific excellence relies on the diversity and creativity of its staff. Overall, the Laboratory's science and engineering (S&E) workforce is composed of 25.2% minority employees, exceeding the national-labor-market availability for minority employees by 10% (see Figure 1.1.e). However, the Laboratory still needs to improve its S&E workforce representation of specific groups, most notably female and African American employees. Through continued recruitment programs at minority institutions and in urban areas, postings, and support of minority-serving science organizations, and strengthening of student programs such as School to Career and CSEE, the Laboratory can continue to enhance the diversity of its S&E hiring pool, which will bring more opportunity to hire a diverse and highly qualified S&E staff.

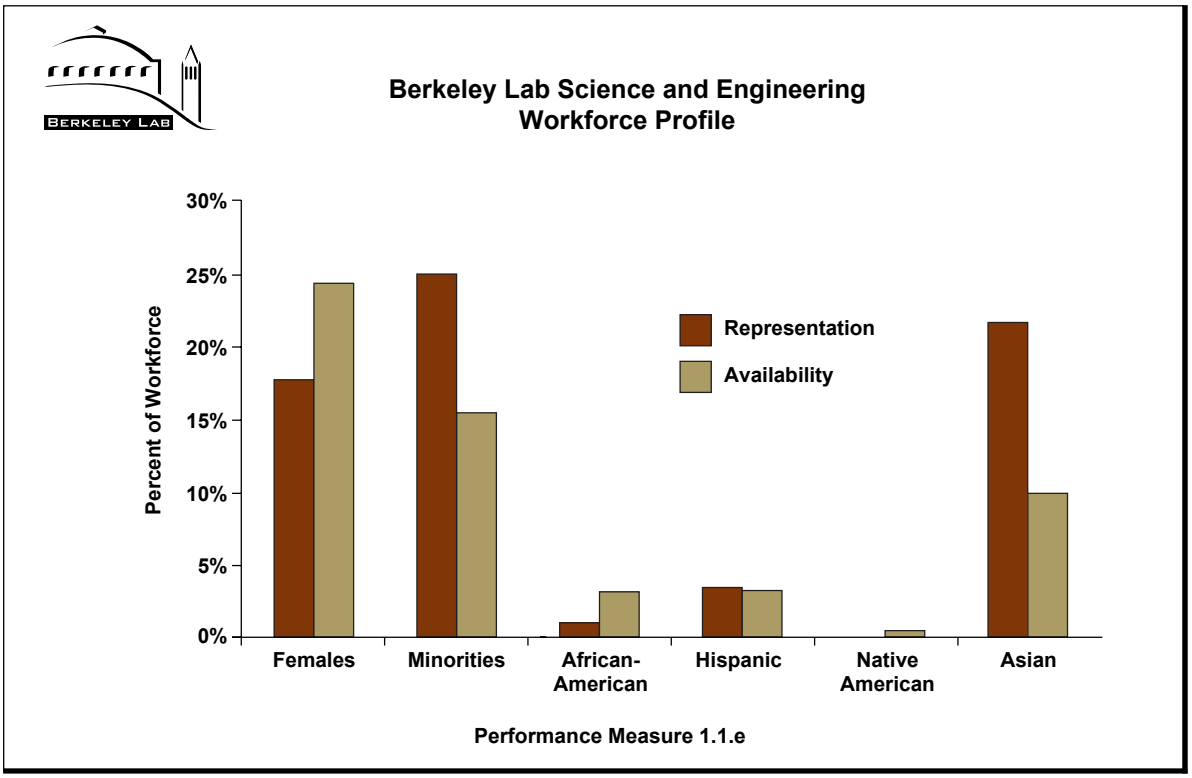


Figure 1.1.e. Berkeley Lab Science and Engineering Workforce Profile. *"Females" and "Minorities" percentages are based on the total S&E workforce. Percentages for African-American, Hispanic, Native American, and Asian are relative to the total S&E workforce, and they total to the second set of data (minorities). Minority females are counted in both minority and female.*

Berkeley Lab continues to show its employees and the surrounding regional workforce that it is committed to their advancement by instituting outreach and recruitment programs and initiatives. In addition to employee-support programs and diversity tools, workforce diversity has also been supported by other Laboratory functions and programs, such as the Human Resources Recruitment Office, CSEE, and the School-to-Career Program.

To further encourage employee accountability, the Laboratory's performance-evaluation criteria continue to include a diversity performance expectation for both management and staff:

"Employees at all levels of the organization are expected to work effectively within our diverse culture by promoting and supporting an environment in which all employees are valued, respected, and included. Managers and supervisors have the additional responsibility to enhance this development by modeling and sustaining the commitment among team members and staff."

In support of the Laboratory's continuing effort to support the Performance Review and Development (PRD) diversity expectation, a diversity training program, "Effective Leadership for Managing a Diverse Workforce," has been instituted for managers and supervisors. This program is ongoing; next

fiscal year, the diversity-training program will include nonsupervisory employees.

This industry best practice is based on the Director's recognition that diversity is valued if it is a means to achieving Laboratory goals, and if individuals are held accountable for their organization's diversity-performance expectation.

Successes/ Shortfalls

In its third year of divisional diversity-development activities, Berkeley Lab division management again participated in diversity planning by submitting diversity action plans that target their short- and long-term staffing and recruiting needs. As they did in 2002, many division managers cited specific efforts toward diversity outreach and student internships, activities supported by the Laboratory's School-to-Career and Center for Science and Engineering Education programs. This Laboratory-wide support of Berkeley Lab's School-to-Career and mentorship programs has in the past year nearly doubled its number of student interns, many of whom have become qualified new hires, advancing the diversity planning and science mission for the Department of Energy.

The Director furthered the Laboratory's commitment to diversity best practices by forming the Best Practices Diversity Council and continuing to include the diversity expectation in all employees' annual PRD, which was introduced for the first time last year. The Best Practices Diversity Council serves to integrate diversity activities at the senior-management level, and the PRD continues to ensure employee accountability for workforce diversity at all levels.

Supporting Data

- Web Site for Workforce Diversity Office (http://www.lbl.gov/Workplace/WFDO/)
- Web Sites for Individual Workforce Diversity Action Plans (http://www.lbl.gov/Workplace/WFDAP/)
- Performance Review and Development forms (http://www.lbl.gov/Workplace/HumanResources/forms)
- Lawrence Berkeley National Laboratory Draft Institutional Plan FY 2004–2008
- Memorandum to Division Directors from Director Shank, Establishment of Berkeley Lab Best Practices Diversity Council (December 2002)
- "New Diversity Council to Focus on Divisional Efforts," *Currents* (January 10, 2003) (http://www.lbl.gov/Publications/Currents/Archive/Jan-10-2003.html#Bulletin)

Table 1. Appraisal Scoring Guidelines for Laboratory Management

The performance expectation for each Performance Measure will use the scoring criteria indicated below. Each Performance Measure indicates the relative weights between the Approach/Deployment criteria and the Results criteria.

Narrative Rating (Score Range)	*Approach/Deployment*	*Results*
Unsatisfactory (59% and Below)	• Little or no systematic approach evident; anecdotal information	• Little or no results in key mission and business areas.
Marginal (60 to 69%)	• Beginning of a systematic approach to the key mission and business areas. • Early stages of a transition from reacting to problems to a general-improvement orientation. • Major gaps exist in deployment that would inhibit progress in achieving the key mission and business objectives.	• Early stages of developing; some improvements and/or early good performance level in a few key mission and business areas.
Good (70 to 79%)	• A sound systematic approach, responsive to the key mission and business areas. • A fact-based improvement process in place in key areas; more emphasis is placed on improvement than on reaction to problems. • No major gaps in deployment, though some areas may be in the very early stages of deployment.	• Improvement trends and/or good performance levels reported for most key mission and business areas. • No pattern of adverse trends and/or poor performance levels in the key mission and business areas. • Some trends and/or current performance levels show areas of strength and/or good to very good relative performance levels.
Excellent (80 to 89%)	• A sound systematic approach, responsive to the key mission and business areas. • A fact-based improvement process is a key management tool; clear evidence of refinement and improved integration as a result of improvement cycles and analysis. • Approach is well developed, with no major gaps; deployment may vary in some areas.	• Current performance is excellent in most key mission and business areas. • Most improvement trends and/or current performance levels are sustained in most other areas. • Many to most trends and/or current performance levels show areas of leadership and very good relative performance levels.
Outstanding (90 to 100%)	• A sound systematic approach, fully responsive to key mission and business areas. • A very strong fact-based improvement process is a key management tool; strong refinement and integration backed by excellent analysis. • Approach is fully deployed without significant weaknesses or gaps in the key areas.	• Current performance is outstanding in most key mission and business areas. • Excellent performance levels in most other areas. • Strong evidence of industry and benchmark leadership demonstrated in many areas.

Self-Assessment Report for Fiscal Year 2003

Environment, Safety, & Health

Ernest Orlando Lawrence Berkeley National Laboratory

Performance Characterization

Berkeley Lab assessed three key areas of Environment, Safety, & Health (ES&H) performance for the FY-2003 Appendix F Performance Objectives, Criteria, and Measures (POCMs). The first area evaluated best practices and the implementation of national standards for ES&H programs and systems; the second area measured ES&H processes to validate that Integrated Safety Management (ISM) is fully implemented and robust at all levels of Laboratory operations; and the third area reviewed performance results from four ES&H outcome measures. Altogether, it is the intent that FY-2003 POCMs confirm that the Laboratory effectively conducts work safely and in an environmentally responsible manner, and is striving to continuously improve its ES&H programs and systems.

Preamble

The Laboratory's goal is to accomplish its mission cost-effectively while striving for an injury-free workplace, minimizing waste streams and adverse impacts to the public and environment from its operations.

The following Performance Objective, Criteria, and Measures are linked to best practices and national standards for ES&H programs and systems. They include best practices in self-assessment and hazard analysis, certified/independently validated ES&H management systems, and process and outcome measures to validate Integrated Safety Management.

Unless otherwise specified in the Performance Measures, the performance period is October 1, 2002, through September 30, 2003.

Performance Objective #1

Do Work Safely: *The Laboratory uses best practices and certified/independently validated management systems to integrate ES&H into Laboratory work processes at all levels so those missions are accomplished while protecting the worker, the public, and the environment.* **(Weight = 100%)**

Summary

For this year's performance period, Berkeley Lab conducted its work safely while protecting workers, the public, and the environment. Integrated Safety Management continues to mature at the Laboratory, resulting in outstanding performance in defining work, identifying and controlling hazards, performing work within authorization, and assessing and improving its ES&H programs and systems. The four outcome measures further validated the effectiveness of ISM at the Laboratory. Most outcome measures were at the Outstanding level. In addition to the process and outcome measures for ISM, Berkeley Lab embarked on an improvement initiative to institute best practices and national standards for its ES&H programs. All milestones related to best practices and certified or independently validated ES&H management systems were completed as scheduled, resulting in an Outstanding rating. Performance ratings for each of the POCMs are summarized in the table on the following page.

POCM No.	Measure	Rating
1.1 Best Practices and Certified/Independently Validated ES&H Management Systems		
1.1.a(i)	Best Practices in Self-Assessment	Outstanding
1.1.a(ii)	Best Practices in Hazard Analysis	Outstanding
1.1.a(iii)	Certified / Independently Validated ES&H Management Systems	Outstanding
1.2 ISM System Process Measures		
1.2.a	Work Planning	Outstanding
1.2.b	Identify and Control Hazards	Outstanding
1.2.c	Perform Work	Outstanding
1.2.d	Feedback and Improvement	Outstanding
1.3 Outcome Measures		
1.3.a	Routine Exposures from Routine Activities	Outstanding
1.3.b	Prevention of Unplanned Radiation Exposures	Outstanding
1.3.c	Control of Radioactive Material	Outstanding
1.3.d	Accident Prevention	Good

Criterion 1.1

Best Practices and Certified/Independently Validated ES&H Management Systems: *The Laboratory will assess, develop, and implement best practices and certified/independently validated ES&H management systems based upon industry best practices and international/national standards.* **(Weight = 40%)**

Performance Measure 1.1.a

Best Practices and Certified/Independently Validated ES&H Management Systems: *The Laboratory will complete scheduled milestones to assess, develop, and implement best practices in (i) self-assessment, (ii) hazard analysis, and (iii) certified/independently validated ES&H management systems.* **(Weight = 40%)**

Agreed-upon milestones are the following:

(i) Best Practices in Self-Assessment (SA)

Milestones	Target Completion
1. Research Department of Energy (DOE) and industry benchmarks and standards for SA programs.	11/01/02
2. Select SA best-practice criteria (i.e., benchmark/standard) most appropriate for Berkeley Lab operations and activities.	11/15/02
3. Define best-practice review process.	01/15/03
4. Identify review panel and schedule review.	3/1/03
5. Complete third-party review of SA program.	6/30/03
6. Identify gap analysis of Berkeley Lab SA program against best practices.	7/30/03
7. Develop best-practice improvements identified by gap analysis.	9/30/03
8. Complete any FY-2003 milestones for implementing best-practice improvements.	9/30/03
9. Complete implementation of best-practice improvements.	TBD (FY 2004)

(ii) Best Practices in Hazard Analysis

Milestones	Target Completion
1. Develop review criteria for the evaluation of best practices for hazard analysis of Berkeley Lab's research and development facilities. Consideration must be given to practices described in DOE Supplemental Directive 5481.1B; LBNL/PUB-3000, Chapter 6; and certified ES&H systems with hazard-analysis elements.	11/15/02
2. Select independent review panel and schedule review.	12/15/02
3. Complete independent review.	3/1/03
4. Identify gap analysis of Berkeley Lab programs against best practices.	4/1/03

Milestones	Target Completion
5. Develop best-practice improvements to address programmatic deficiencies identified in gap analysis. Improvements include actions for determining applicability of DOE Supplemental Directive 5481.1B for Laboratory operations; amending LBNL/PUB-3000, Chapter 6, to institutionalize best-practice improvements; and assuring process consistency with hazard-analysis elements in proposed certified ES&H systems (see Part III below). Prepare schedule for implementation of best-practice improvements.	5/1/03
6. Complete FY-2003 milestones for best-practice improvements.	9/30/03
7. Complete implementation of best-practice improvements.	TBD (FY 2004)

(iii) Certified/Independently Validated ES&H Management Systems

Milestones	Target Completion
1. Research international/national standards for certification/ validation of ES&H management systems.	12/15/02
2. Select international/national standards for certification/ validation of ES&H management systems	1/15/03
3. Develop Berkeley Lab ES&H management systems plan.	6/30/03
4. Conduct assessment by organizations that have experience in ES&H management systems.	TBD (FY 2004)
5. Develop and implement FY-2004 milestones/improvements to address recommendations identified by assessment.	TBD (FY 2004)
6. Develop and implement FY-2005 milestones/improvements to address recommendations identified by assessment	TBD (FY 2005)
7. Implement certification/validation process.	TBD (FY 2005)

Assumptions

1. It is expected that accomplishing this measure will require a multiyear effort.
2. This objective is consistent with the ES&H five-year (FY 2003–FY 2007) strategic plan.
3. A certified/independently validated ES&H management system will be based on:
   - Principles described by the DOE Office of Science (Card memo) of line management accountability, national standards, oversight, contractor accountability, vision, and incentives
   - International/national standards
   - Self-assessment against the standards
4. Berkeley Lab will notify DOE of complications and delays that result in missing milestone target dates. Contract-performance rating will not be lowered when

milestones are completed after the proposed target dates, with no adverse impacts to the certification/validation process.

5. To complete the best-practice studies and certification process, new milestones will be developed and agreed upon each year by Department of Energy/ Berkeley Site Office (DOE/BSO) and Berkeley Lab for FY 2004 and FY 2005.
6. The selection of the independent review panels for the best-practice studies in self-assessment and hazard analysis must be jointly agreed upon by DOE/BSO and Berkeley Lab.
7. The selection of the certification/validation standards and systems must be jointly agreed upon by DOE/BSO and Berkeley Lab. Certified/independently validated ES&H management systems under consideration include ISO 14001 Environmental Management System elements, Voluntary Protection Program (VPP), OSHAS 18001 Occupational Safety and Health Management System elements, Accreditation Association for Ambulatory Health Care (AAAHC), Emergency Management, and DOE Laboratory Accreditation Program (DOELAP). The DOE/BSO Director and Berkeley Lab Deputy Director of Operations will resolve conflicts in the selection process. Contract-performance ratings will not be lowered in the event milestone target dates are missed due to the conflict-resolution process.
8. The certification/validation process will be based upon nationally recognized standards and performed by nationally recognized experts.
9. Validation of the best-practice improvements must be conducted by DOE/BSO.

Gradient:

Unsatisfactory:	Little or no effort has been demonstrated towards the achievement of the performance measure.
Marginal:	Some effort is demonstrated; however, results fall short of the expectations for the “Good” gradient.
Good:	Weighted completion of 11 of 17 milestones scheduled for FY 2003.
Excellent:	Weighted completion of 13 of 17 milestones scheduled for FY 2003.
Outstanding:	Weighted completion of 15 of 17 milestones scheduled for FY 2003.

Performance Measure Results

Seventeen milestones were scheduled for completion during the performance period, all of which Berkeley Lab successfully completed on time. The Laboratory performed the following actions to accomplish the milestones:

Performance Measure 1.1.a(i). Best Practices in Self-Assessment

Milestones	Target Completion	Actual Completion
1. Research DOE and industry benchmarks and standards for SA programs.	11/01/02	10/14/02
2. Select SA best-practice criteria (i.e., benchmark/standard) most appropriate for Laboratory operations and activities.	11/15/02	10/14/02
Action: The DOE Office of Environment, Safety, and Health (DOE/EH) Self-Assessment Accreditation Working Group convened at Berkeley Lab on September 18–19 to finalize the accreditation objectives and criteria and the accreditation-review process. The working-group meeting in September was the culmination of activities that had taken place during the past several months to identify best practices for self-assessment programs. The consensus of the working group was to utilize the self-assessment principles developed by the Institute of Nuclear Power Operations (INPO) as the basis for accreditation. The working group made minor changes to the INPO self-assessment principles to better correlate with DOE and Laboratory operations and activities. A final version of the self-assessment-accreditation objectives and criteria was approved in mid-October.		
3. Define best-practice review process.	1/15/03	1/15/03
Action: As part of the same process for developing accreditation objectives and criteria, the DOE/EH Self-Assessment Accreditation Working Group also developed the review process for accreditation in October 2002. The Laboratory submitted a self-evaluation report of its Self-Assessment Program in January 2003 (copy provided to Berkeley Site Office [BSO] point of contact). DOE/EH members of the Working Group will review and comment on the self-evaluation report. The accreditation process will then include (1) selecting an independent review panel to conduct the on-site review of Berkeley Lab's self-assessment program, (2) scheduling and conducting the on-site review in the spring, (3) addressing findings identified in the review report, and (4) appearing before a DOE/HQ-based accreditation board to present Berkeley Lab's self-assessment program and status of corrective actions generated by the on-site review.		
4. Identify a review panel and schedule review.	3/1/03	3/1/03
Action: A self-assessment review panel was selected with the following members: • Chip Lagdon, DOE/EH-21, team leader • George Detsis, DOE/EH-24 • Jack Anderson, Environment, Health, and Safety (EH&S) Director, Princeton Plasma Physics Laboratory (PPPL) • Larry Coulson, EH&S Director (retired), Fermi National Accelerator Laboratory (FNAL)		

Milestones	Target Completion	Actual Completion
5. Complete third-party review of SA program.	6/30/03	6/15/03
Action: The Review Panel conducted its evaluation of Berkeley Lab's Self-Assessment Program during the week of April 28–May 2. The Panel assessed the Laboratory's program against the twelve INPO-based accreditation objectives and criteria developed by the Accreditation Working Group. The on-site agenda included program presentations, interviews with senior and line managers and staff, and walkthroughs/orientations of facilities and work processes. At the closeout conference on May 2, the Panel provided preliminary results of noteworthy practices and areas for improving the Laboratory's Self-Assessment Program. The final panel report was submitted to BSO and Berkeley Lab in mid-June. Based on the overall results of their review, the panel recommended that Berkeley Lab move forward to the next step of the accreditation process, namely to present its SA Program to the DOE Accreditation Board at DOE Headquarters (DOE/HQ).		
6. Identify gap analysis of Berkeley Lab SA program in comparison to best practices.	7/30/03	7/29/03
7. Develop best-practice improvements identified by the gap analysis.	9/30/03	7/29/03
8. Complete any FY-2003 milestones for implementing best-practice improvements.	9/30/03	9/30/03
Action: A combined gap analysis and corrective-action implementation plan was completed on July 29, 2003. The report identifies actions the Laboratory will complete to improve its Self-Assessment Program and to progress to the final stage of the accreditation process. Improvements already completed in FY 2003 include (1) mandatory EH&S training for supervisors and managers (EHS 20), which was approved by the Safety Review Committee and senior Laboratory management, and (2) self-assessment training (EHS 799), which is required for involved division personnel. Fourteen of the 16 division safety coordinators have completed EHS 799. All other improvement actions are scheduled for completion in FY 2004.		

Performance Measure 1.1.a(ii). Best Practices in Hazard Analysis

Milestones	Target Completion	Actual Completion
1. Develop review criteria for the evaluation of best practices for hazard analysis of Berkeley Lab's research and development facilities. Consideration will be given to practices described in DOE Supplemental Directives 5481.1B and LBNL/PUB-3000, Chapter 6; and to certified ES&H systems with hazard-analysis elements.	11/15/02	11/06/02
Action: A Berkeley Lab working group was formed to develop the review criteria for best practices in hazard analysis. The group reviewed hazard-analysis processes described in DOE Orders and Directives, Occupational Safety and Health Administration (OSHA) regulations, and LBNL/PUB-3000. The working group determined that the most appropriate criteria to use for the best-practice review should be based on the objectives in DOE Directive 5481.1B, *Safety Analysis and Review System*, and on the Safe Work Authorization requirements in LBNL/PUB-3000, Chapter 6. The review criteria were finalized at the beginning of November 2002.		
2. Select independent review panel and schedule review.	12/15/02	12/10/02
Action: The independent review panel was selected. The panel included the following members: • Jeremiah Lynch, Consultant (government and private-sector business base) • Earl Carnes, DOE Office of Nuclear and Facility Safety • Paul Norton, Lam Research, Senior Manager, Global EH&S • Ron Owen, IBM Advisory Engineer		
3. Complete independent review.	3/1/03	1/30/03
Action: Berkeley Lab provided the review panel members with Laboratory hazard-analysis program information and documents in December 2002. The panel conducted its on-site review on January 16–17, 2003. The agenda, review criteria, and panel members' curriculum vitae were provided to BSO for its files. The review panel's final report provided recommendations for improving the Laboratory's hazard-analysis process. The panel also acknowledged that the Laboratory's hazard-analysis system, as described in LBNL/PUB-3000, Chapter 6, "does correspond with the goals of OAK SD 5481.1B and goes beyond the expectations of the hazards assessment practices that are considered best practices in industry." The final panel report was forwarded to BSO.		
4. Identify gap analysis of Berkeley Lab programs against best practices.	4/1/03	4/1/03
Action: The Environment, Health, and Safety (EH&S) Division Safety Engineering Group conducted a gap analysis of the panel report to determine opportunities to improve the Laboratory's hazard-analysis process. Recommended areas for improvements identified in the panel report include revision of LBNL/PUB-3000, Chapter 6; competency training; prevention measures in Laboratory Corrective Action Tracking System (LCATS); and chemical inventory. The EH&S gap analysis report was forwarded to BSO.		

Milestones	Target Completion	Actual Completion
5. Develop best-practice improvements to address programmatic deficiencies identified in gap analysis.	5/1/03	5/1/03
Action: Based on the gap analysis, a best-practice improvement plan was developed to improve the hazard-analysis process at Berkeley Lab. Specific actions, responsible individuals, and target completion dates are identified in the improvement plan. Key actions include the review and revision of trigger levels and descriptors in LBNL/PUB-3000, Chapter 6, by EH&S group leaders; revision of on-the-job training (OJT) and competency-training documentation; modification of the LCATS corrective-action process; additional utilization of the new Chemical Management System; and a work-authorization-process-review assessment of the impact of synergistic and aggregate hazards. The best-practice improvement plan was forwarded to BSO.		
6. Complete FY-2003 milestones for best-practice improvements.	9/30/03	9/30/03
Action: The following improvements for hazard analysis were completed during FY 2003: 1. Mandatory EH&S training for supervisors and managers was approved by the Safety Review Committee and Berkeley Lab senior management. 2. Chapter 6 of LBNL/PUB-3000 has been revised to provide a better definition of "significant changes" to trigger additional formal authorization review. 3. Integrated Functional Appraisals (IFAs) are now mandatory on a triennial basis. 4. Office of Assessment and Assurance (OAA) will be automatically notified of all Hazard Level 1 or 2 deficiencies from the LCATS database. OAA will work with the appropriate parties to determine root causes and preventative measures. 5. The new Berkeley Lab Chemical Management System database is now on-line and can now screen building/laboratory chemical inventories against thresholds set forth in 29 CFR 1910.119.		

Performance Measure 1.1.a(iii). Certified, Independently Validated ES&H Management Systems

Milestones	Target Completion	Actual Completion
1. Research international/national standards for certification/validation of ES&H management systems.	12/15/02	12/9/02
2. Select international/national standards for certification/validation of ES&H management systems.	1/15/03	1/15/03

Action: Each program manager or group leader from the EH&S Division researched their programs for international/national standards or certification processes. As a result of their research, the following ES&H management systems have been identified for certification or independent validation:

- Applicable elements of International Standards Organization (ISO) 4001, Environmental Management System
- Voluntary Protection Program (VPP), Occupational Health and Safety Program
- DOE Laboratory Accreditation Program (DOELAP)
- Environmental Laboratory Accreditation Program (ELAP), State of California
- Instrument Calibration Program (selection of one of the following candidate accreditations per the instrument calibration action plan):
  - ISO 17025
  - National Voluntary Laboratory Accreditation Program (NVLAP), National Institute of Standards and Technology (NIST)
  - American Association for Laboratory Accreditation (AALA)
  - Conference of Radiation Control Program Directors (CRCPD)
  - Accredited Instrument Calibration Laboratory, Health Physics Society (HPS)
- Emergency Management Accreditation Program, Federal Emergency Management Agency (FEMA), National Emergency Management Association (NEMA), International Association of Emergency Managers (IAEM) certification
- Accreditation Association for Ambulatory Health Care (AAAHC), Occupational Medicine

3. Develop Laboratory ES&H management systems plan.	6/30/03	6/30/03

Action: Action plans for achieving certification or validation of candidate certified systems have been completed. Each plan identifies the key actions planned by the responsible manager to obtain certification or validation of their ES&H management system over the next several years. Laboratory managers with candidate-certified/validated systems have met with their DOE/BSO counterparts to discuss the proposed activities in their action plans. All plans were submitted to BSO.

Objective #1
Criterion 1.2

ISM System Process Measures: *The Laboratory uses the five core functions and seven principles of Integrated Safety Management (ISM) in its management and work processes.* **(Weight = 30%)**

Assumptions (for all process measures)

1. Supplemental information on the quality and effectiveness of Berkeley Lab's ISM program can be provided through the BSO/Berkeley Lab Operational Awareness (OA) Program. To support the gathering of information, the Laboratory reports on significant changes in ES&H systems and processes at the quarterly OA meetings. Examples of significant changes include modifications of any ISM plans; changes to ES&H policies and requirements in the Regulations and Procedures Manual (RPM), LBNL/PUB-3000, Operating and Assurance Plan (OAP), and Work Smart Standard (WSS) set; and alterations in EH&S Division staffing patterns, allocation of resources, and/or organizational structure.
2. The Laboratory's self-assessment program is a major component for evaluating ISM at the Laboratory. BSO personnel are invited to participate as observers in self-assessment activities, including, but not limited to, validation of division self-assessments and integrated functional appraisals. DOE observers can provide feedback on the Laboratory's self-assessment activities. Such feedback can be used as supplemental information to address the quality and effectiveness of the Laboratory's Self-Assessment Program.
3. ISM plans refer to the Laboratory's Institutional Safety Plan, each division's ISM plan, and the Operations departmental (Facilities and Directorate) ISM plans.
4. Subcontractor operations/personnel are included in ISM implementation if the subcontractor is performing part of the Laboratory's operations and reporting its hours to the Laboratory. To this end, the Laboratory's contracting process evaluates and considers the safety record of prospective subcontractors; once selected, subcontractor statistics are gathered and performance is tracked separately. Subcontractors are excluded from Berkeley Lab's reports to Occupational Safety and Health Administration (OSHA) if they are "servicing" the Laboratory (e.g., copy machine vendors or other transient workers).
5. Peer reviews, existing procedures, implementing memoranda, Laboratory tracking system data, and other work-process products serve as demonstrable evidence in contribution to satisfaction of measure gradients. Successes and difficulties associated with these processes are included in the report. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or necessary to perform the work.
6. The evaluation of the process measure is the DOE validation of the effectiveness of ISM implementation.
7. Environmental management is a key component of the Laboratory's ISM plan. Environmental performance as described in FY-2002 Appendix F, Measure 1.2.h, Waste Reduction and Recycling; Measure 1.2.g, Tracking Environmental Incidents; Measure 1.3.a, Environmental Restoration Schedule Variance; and Measure 1.4.a, Environmental Restoration Cost Variance, must be evaluated in Process Measure 1.2.c, Perform Work, and reported at least quarterly in either Operational Awareness meetings, DOE/LBNL program meetings, ES&H quarterly reports, or Site Environmental Reports. Overall rating of environmental performance is the average gradient performance for all four measures.

Objective #1
Criterion 1.2
Process Measure 1.2.a

Work Planning: *Line management provides evidence that the ISM division plans and work planning adequately identify and prioritize resources to address programmatic needs and work safety. Line managers regularly participate in ES&H activities.* **(Weight = 7.5%)**

Gradient:

Unsatisfactory: Little or no effort has been demonstrated toward achievement of the performance measure.

Marginal: Some effort is demonstrated; however, results fall short of the expectations for the "Good" gradient.

Good: More than 70% of division ISM plans have been reviewed and updated within past year. ISM plans are evaluated for quality of content to address the division scope of work and for consistency with institutional ISM requirements. Work planning demonstrates that work and safety priorities are adequately balanced. Line managers regularly participate in ES&H activities. The institutional ISM plan has been reviewed and updated for changes in sitewide scope of work.

Excellent: More than 80% of division ISM plans have been reviewed and updated within past year. ISM plans are evaluated for quality of content to address the division scope of work and for consistency with institutional ISM requirements. Work planning demonstrates that work and safety priorities are adequately balanced. Line managers regularly participate in ES&H activities. The institutional ISM plan has been reviewed and updated for changes in sitewide scope of work.

Outstanding: More than 90% of division ISM plans have been reviewed and updated within past year. ISM plans are evaluated for quality of content to address the division scope of work and for consistency with institutional ISM requirements. Work planning demonstrates that work and safety priorities are adequately balanced. Line managers regularly participate in ES&H activities. The institutional ISM plan has been reviewed and updated for changes in sitewide scope of work.

Performance Measure Result

All divisions and other applicable Laboratory organizations reviewed and updated, as appropriate, their ISM plans within the past year. The institutional ISM Plan was last reviewed and updated in December 2002. Review of the updated ISM plans demonstrated that divisions' scope of work, allocation of resources, and balance of work and safety priorities were addressed adequately. Under ISM functions to define the scope of work, identify and control hazards, and provide feedback and improvements, divisions and applicable organizations demonstrated that their line managers regularly participated in ES&H activities. These performance results were validated by OAA during the annual division self-assessment review process in August 2003. Division ratings of performance by OAA for this measure are as follows:

Performance criteria: Line management provides evidence that the ISM division plans and work planning adequately identify and prioritize resources to address programmatic needs and work safety. Line managers regularly participate in ES&H activities.

Division	Performanc e Rating	Division	Performance Rating
Accelerator and Fusion Research	**M**	Advanced Light Source	**M**
Chemical Sciences	**M**	Computing Sciences	**M**
Directorate/Operations	**M**	Earth Sciences	**M**
Engineering	**M**	Environmental Energy Technologies	**M**
Environment, Health & Safety	**M**	Facilities	**M**
Life Sciences	**M**	Materials Sciences	**M**
Nuclear Sciences	**M**	Physics	**M**
Physical Biosciences	**M**	Genomics	**M**
			Percent Performance (48/48) = 100%

Rating Legend:

M	Fully met criteria (3 points)
P	Partially met criteria (2 points)
U	Marginally or unsatisfactorily met criteria (1 point)

Objective #1
Criterion 1.2
Process Measure 1.2.b

Identify and Control Hazards: *Divisions have a process to appropriately identify, analyze, and categorize the hazards and have identified the appropriate requirements to mitigate the risks associated with the division's work.*
(Weight = 7.5%)

Gradient:

Unsatisfactory: Little or no effort has been demonstrated toward achievement of the performance measure.

Marginal: Some effort is demonstrated; however, results fall short of the expectations for the "Good" gradient.

Good: Hazards have been appropriately identified for more than 70% of division self-authorized work and more than 90% of work requiring formal authorizations (i.e., RWAs, RWPs, AHDs, SSAs).

Excellent: Hazards have been appropriately identified for more than 80% of division self-authorized work and more than 95% of work requiring formal authorizations.

Outstanding: Hazards have been appropriately identified for more than 90% of the work requiring division self-authorization and 100% of work requiring formal authorizations.

Performance Measure Result

Hazards are appropriately identified for work requiring division self-authorization and formal authorizations (i.e., Radiological Work Authorizations [RWAs], Radiological Work Permits [RWPs], activity hazard documents [AHDs], sealed source authorizations [SSAs]). For formal authorizations, the hazards and authorized work are tracked through the Radiation Authorization Database and Reports (RADAR) for radiological materials and through the AHD database for other hazardous materials or equipment, both managed by the EH&S Division. All authorized work is reviewed and updated at least annually. Significant midyear changes in scope of authorized work require an additional review and approval at the time of the change. Division self-authorized work is managed by divisions in a number of different ways. Some divisions require the completion of a safety-review questionnaire; others required an assurance memo from principal investigators and managers. Most divisions also identify hazards and track self-authorized work through the Hazards, Equipment, Authorizations, and Review (HEAR) database (which is also managed by EH&S). The systems used by each division to identify hazards and to ensure that controls are in place were validated by OAA during the annual division self-assessment review process in August 2003. Division ratings of performance by OAA for this measure are as follows:

Performance criteria: Divisions have a process to appropriately identify, analyze, and categorize the hazards and have identified the appropriate requirements to mitigate the risks associated with a division's work.

Division	Performanc e Rating	Division	Performance Rating
Accelerator and Fusion Research	**M**	Advanced Light Source	**M**
Chemical Sciences	**M**	Computing Sciences	**M**
Directorate/Operations	**M**	Earth Sciences	**M**
Engineering	**M**	Environmental Energy Technologies	**M**
Environment, Health & Safety	**M**	Facilities	**M**
Life Sciences	**M**	Materials Sciences	**M**
Nuclear Sciences	**M**	Physics	**M**
Physical Biosciences	**M**	Genomics	**M**
			Percent Performance (48/48) = 100%

Rating Legend:

M	Fully met criteria (3 points)
P	Partially met criteria (2 points)
U	Marginally or unsatisfactorily met criteria (1 point)

Objective #1
Criterion 1.2
Process
Measure 1.2.c

Perform Work: *Work is performed within the conditions and requirements for ES&H specified by Laboratory policies and procedures.* **(Weight = 7.5%)**

Gradient:

Unsatisfactory: Little or no effort has been demonstrated toward achievement of the performance measure.

Marginal: Some effort is demonstrated; however, results fall short of the expectations for the "Good" gradient.

Good: More than 80% of authorized work (i.e., SAA, AHD, RWA, RWP, X-Ray, SSA, SAD) is in compliance. (Note: RWA compliance is measured against major and significant deficiencies.) More than 80% of required ES&H training is completed. More than 90% of serious and imminent danger situations, as defined by LCATS Hazard Level 1 and 2, are identified, analyzed for root causes, and mitigated within the specified timeframe. Environmental performance is achieved at an overall "Good" gradient level, as specified in the FY 2002 Appendix F performance measures 1.2.h, 1.2.g, 1.3.a, and 1.4.a (see Assumption #7).

Excellent: More than 85% of authorized work (i.e., SAA, AHD, RWA, RWP, X-Ray, SSA, SAD) is in compliance. (Note: RWA compliance is measured against major and significant deficiencies.) More than 85% of required ES&H training is completed. More than 95% of serious and imminent danger situations, as defined by LCATS Hazard Level 1 and 2, are identified, analyzed for root causes, and mitigated within the specified timeframe. Environmental performance is achieved at an overall "Excellent" gradient level, as specified in the FY 2002 Appendix F performance measures 1.2.h, 1.2.g, 1.3.a, and 1.4.a (see Assumption #7).

Outstanding: More than 90% of authorized work (i.e., SAA, AHD, RWA, RWP, X-Ray, SSA, SAD) is in compliance. (Note: RWA compliance is measured against major and significant deficiencies.) More than 90% of required training is completed. 100% of serious and imminent danger situations, as defined by LCATS Hazard Level 1 and 2, are identified, analyzed for root causes, and mitigated within the specified timeframe. Environmental performance is achieved at an overall "Outstanding" gradient level, as specified in the FY 2002 Appendix F performance measures 1.2.h, 1.2.g, 1.3.a, and 1.4.a (see Assumption #7).

Performance Measure Result

More than 90% compliance was achieved for authorized work. Compliance for managing hazardous waste in Satellite Accumulation Areas (SAAs) was at 97%, as indicated by more than 1,213 SAA inspections performed during the performance period. Only one Nonconformance and Corrective Action Report (NCAR) has been issued this year, for the inaccurate weight of a waste shipment. For radiological work and materials, the Laboratory is at more than 98% compliance, as shown by 2,009 surveys of controlled areas. Only seven major or serious deficiencies were discovered for radiological work at four LBNL divisions. Four of the seven deficiencies involved inadequate surveying and monitoring of the work area; two deficiencies involved work activities not authorized by the Radiological Work Authorizations; and the last deficiency involved contamination discovered outside a posted radioactive material work area. (Note: below thresholds to be an ORPS reportable occurrence.) The deficiencies have all been corrected.

On a sitewide basis, 92% of required ES&H training has been completed by Laboratory employees and participating guests.

Berkeley Lab experienced two serious violations (imminent-danger situations) during the performance period. An EH&S safety professional discovered evidence of a violation of an interlock on a door to a high-voltage cage in Building 58: A plastic cable tie was on the interlock switch, ready to defeat and bypass the switch at any time. Following the discovery, a management/subject-matter-expert committee investigated the incident and instituted additional controls to preclude such violations in the future. The root cause identified for this incident was a personnel error in which procedures were not used or used incorrectly. In the second incident, EH&S discovered a crane-bridge walkway in Building 51B where personnel were not using fall-protection equipment or devices to prevent a potential fall of at least 50 feet. Although the building is slated for demolition during this calendar year, a fall-protection scheme has been devised for those few instances where the crane must be serviced this year. The root cause for this incident appears to be a management problem where policy was not adequately defined, disseminated, and enforced.

To demonstrate its continued commitment to environmental protection, Berkeley Lab used last year's four environmental Appendix F performance measures to evaluate progress for the current performance year (see Assumption #7). Performance results are as follows:

Performance Measure 1.2.g, Tracking Environmental Incidents. Berkeley Lab experienced no environmental violations or releases during the performance period. Performance is at the Outstanding gradient.

Performance Measure 1.2.h, Waste Reduction and Recycling. Berkeley Lab achieved the following annual percent reduction from the 1993 baseline level (data current as of 6/30/03). The total score amounts to an Excellent rating.

Waste Stream	% Reduction	Score
Hazardous	76.5%	3
Low-Level	71.0%	2
Mixed	82.7%	3
Sanitary	71.9%	3
	Total Score	11

Performance Measure 1.3.a, Environmental Restoration Schedule Variance. This measure tracks the Laboratory's Environmental Restoration Program (ERP) performance in executing projects in accordance with an approved overall schedule. Three components, the schedule variance and completion of regulatory and nonregulatory milestones, are tracked to evaluate overall performance. As of the Third Quarter, ERP is about 6% behind schedule but has completed all required milestones. According to the Office of Environmental Management guidance, the FY-2003 program was prepared in accordance with the budget proposed in the Performance Management Plan. Actual FY-2003 funding is $307,000 less than the requested budget. Additionally, final funding levels were not clear throughout the Third Quarter; therefore, certain activities were delayed in the Third Quarter to ensure that approved funding targets would not be exceeded; however, because of the cost-savings initiatives, the current schedule variance is expected to be closed by the end of FY 2003. The Laboratory anticipates an Outstanding rating by year-end.

Milestones completed to date:

- Three Quarterly Progress Reports dated November 2002, February 2003, and May 2003 were submitted to the Department of Toxic Substances Control (DTSC).
- Ecological and Human Health Risk Assessments were submitted to DTSC in December 2002 and January 2003.
- Several work plans for pilot tests were submitted to DOE and DTSC.

Performance Measure 1.4.a, Environmental Restoration Cost Variance. This measure addresses the Laboratory's ERP performance against the FY-2003 baseline. The current FY-2003 baseline funding for the ERP is $3,491,000. As of the end of Third Quarter, the ERP cost variance is equal to approximately 7%. The Laboratory anticipates an Outstanding rating by year-end.

- Actual cost of work performed (ACWP) through the Third Quarter is $2,484,000.
- Budgeted cost of work performed (BCWP) through the Third Quarter is $2,665,000.
- Cost variance through the Third Quarter is 7%.

Overall environmental performance is at the Outstanding level (based on the average gradient performance for all four measures).

Objective #1
Criterion 1.2
Process Measure 1.2.d

Feedback and Improvement: *Opportunities for institutional improvements are identified from the Laboratory's annual ES&H Self-Assessment Report. Milestones for implementing improvements are met.* **(Weight = 7.5%)**

Gradient:

Unsatisfactory: Little or no effort has been demonstrated toward achievement of the performance measure.

Marginal: Some effort is demonstrated; however, results fall short of the expectations for the "Good" gradient.

Good: Opportunities for institutional improvements are identified in the Laboratory's annual ES&H Self-Assessment Report. A plan of action with milestones for each improvement target has been developed.

Excellent: More than 80% of the milestones in the plan of action have been met.

Outstanding: More than 90% of the milestones in the plan of action have been met.

Performance Measure Result

Three opportunities for institutional improvements were identified in last year's annual ES&H Self-Assessment Report. During the performance period, 10 of the 11 corrective-action milestones (90%) were completed or are on schedule.

Opportunity for Improvement	Corrective Action	Status
Legacy Waste. The management of legacy waste poses challenges to many people in the Laboratory community. Personnel participating in deconstruction and decommissioning activities must follow rigorous protocols to prevent employee exposures and environmental releases. Material handling by EH&S staff requires vigilance to ensure proper characterization and to prevent contamination of people and property. Researchers are responsible for accurate characterization of materials and waste, including proper material disposition when leaving the institution, to avoid future generation of legacy items. These diverse activities require institutional coordination.	1. Berkeley Lab will clarify roles and responsibilities for legacy waste.	Completed
	2. EH&S will provide appropriate and improved staffing for legacy waste projects.	Completed
	3. Current legacy-project goals:	
	• All legacy items in the Heavy Element Research Laboratory (HERL) will be characterized and disposition paths identified.	Completed
	• All Hazardous Waste Handling Facility (HWHF) legacy items will be characterized and disposition paths identified.	On schedule
	• Milestones for Calvin Lab legacy project completed this year. Other work is ongoing.	Completed
	• $900k appropriated to continue deconstruction and decontamination project at Building 51.	Completed

Opportunity for Improvement	Corrective Action	Status
Berkeley Lab/UCB Memorandum of Understanding (MOU). The current MOU regarding ES&H responsibilities between Berkeley Lab and the UC campus requires updating and is a deficiency in the institutional safety program. Managing the ES&H program of Laboratory employees who work on campus under ISM regulations is challenging, due to the lack of division authority over some campus space. Divisions must rely upon the UC ES&H programs for hazard control and staff training.	1. The new MOU will clarify responsibilities for Berkeley Lab and UC Berkeley. 2. Berkeley Lab has reviewed and approved the new MOU. UC Berkeley administrators are currently conducting their final review and approval.	Completed Open
Matrixed Staff. There is still no formal institutional policy on matrixed staff at the Laboratory. Although the Safety Review Committee has provided some leadership, divisions are still currently responsible for forming agreements regarding matrixed staff among themselves, with little formal guidance from the institution. Both the Laboratory-UC and interdivisional ES&H agreements must be updated and formalized.	1. An institutional policy for matrixed employees is drafted. 2. This policy has been reviewed and approved by the Safety Review Committee. 3. Formal adoption of the policy is placed into the Regulations and Procedures Manual and LBNL/PUB-3000.	Completed Completed Completed

Objective #1
Criterion 1.3

ISM System Outcome Measures: *System outcome measures are linked to the ISM process measures. System outcomes are used to validate and drive ISM excellence.* **(Weight = 30%)**

Objective #1
Criterion 1.3
Outcome Measure 1.3.a

Routine Exposures from Routine Activities: *Occupational radiation doses to individuals (excluding accidental exposures) from DOE operations are managed to ensure that applicable 10 CFR 835 limits are not exceeded.* **(Weight = 7.5%)**

Assumptions:

The performance period for this measure is from July 1, 2002 to June 30, 2003.

Any actual or anticipated significant changes in workloads or badged worker population (interpreted to be an increase or decrease of 10% or more) that would affect radiation doses are brought to the attention of UC and DOE, and appropriate adjustments are made.

Some variability is expected, which may not indicate a trend.

This Measure is directed toward current management and control of radioactive materials.

Outcome Measure reports demonstrate how results are used to drive improvement or maintain current best management practices.

Gradient:

Unsatisfactory: Little or no effort is demonstrated toward achievement of the Performance Measure.

Marginal: Some effort is demonstrated; however, results fall short of expectations for the “Good” gradient.

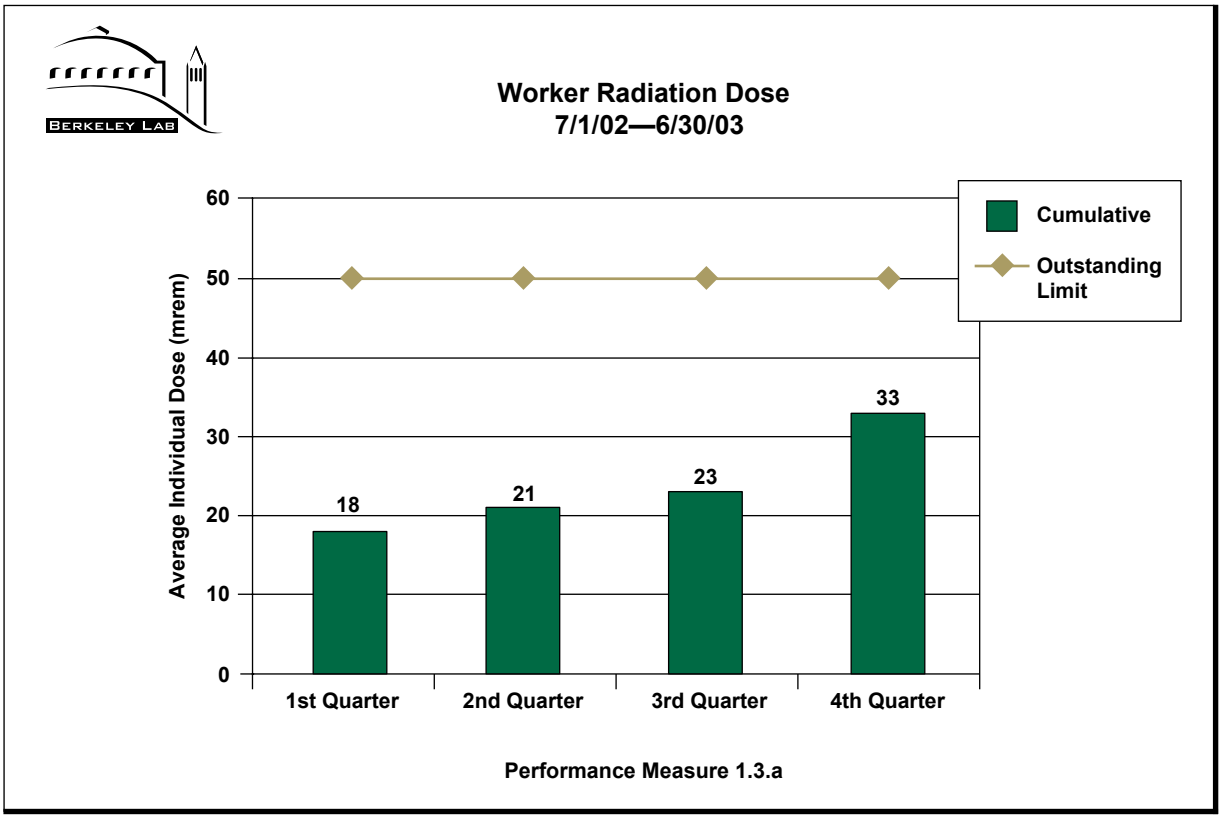
Good: No individual exposures in excess of 500 millirem without an increase in workload, unless specifically authorized in writing and approved by the Radiological Control Manager.

Excellent: Meets all qualifications for “Good,” plus the number of individual exposures exceeding 100 millirem is less than or equal to the control level of 10, without an increase in workload.

Outstanding: Meets all qualifications for “Excellent,” plus the average individual positive dose is less than the control level of 50 millirem, without an increase in workload.

Performance Measure Result

During the performance period from July 1, 2002, through June 30, 2003, one individual received a radiation exposure exceeding 100 mrem, a level of exposure that is below the control level of ten individuals with an exposure of more than 100 mrem; researchers at the Biomedical Isotope Facility at Building 56 anticipated the amount of exposure for that particular individual. On a sitewide basis, the average individual positive dose is 33 mrem, which is below the control level of 50 mrem.



Objective #1
Criterion 1.3
Outcome Measure 1.3.b

Prevention of Unplanned Radiation Exposures: *ORPS reportable occurrences of unplanned radiation exposures and skin or personal clothing contamination are managed and minimized.* **(Weight = 7.5%)**

Assumptions:

For the purpose of this measure, unplanned radiation exposures are considered to be greater than 100 mrem.

The number of individuals contaminated is counted.

Some variability is expected, which may not indicate a trend.

Outcome Measure reports demonstrate how results are used to drive improvement or maintain current best-management practices.

Gradient:

Unsatisfactory: Little or no effort is demonstrated toward achievement of the Performance Measure.

Marginal: Some effort is demonstrated; however, results fall short of expectations for the “Good” gradient.

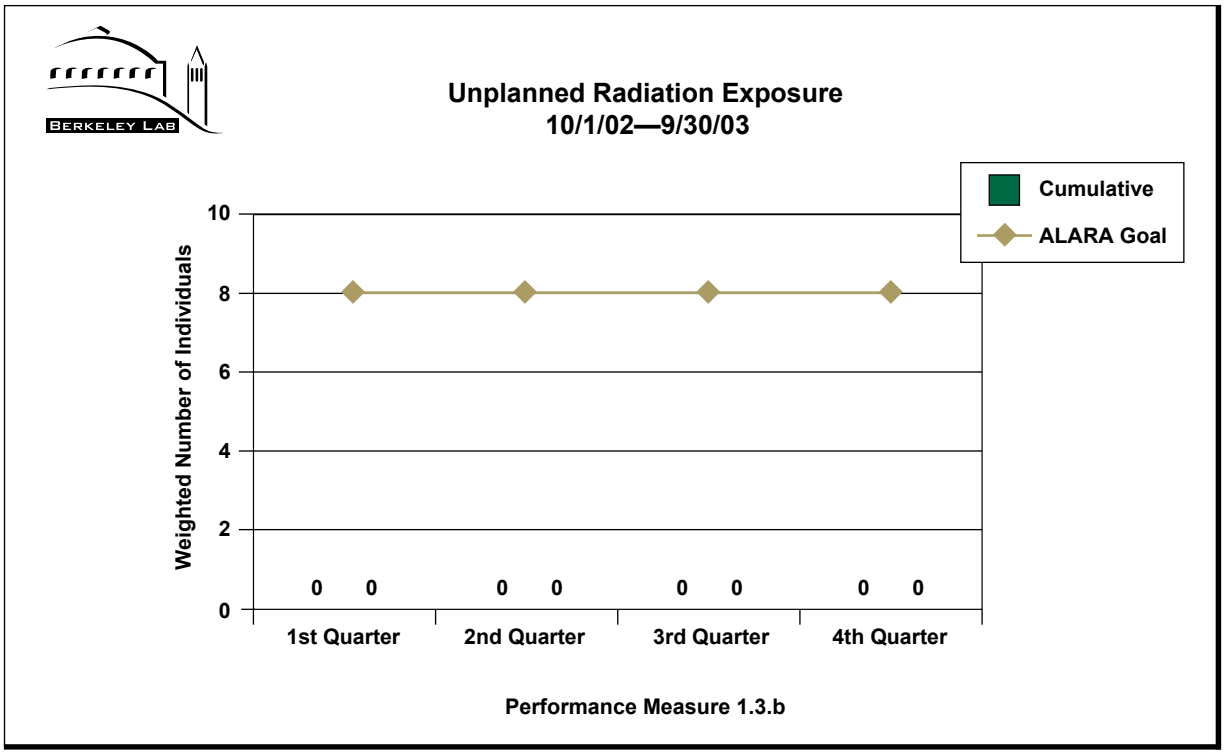
Good: The weighted number of contaminated individuals is more than 6.0 but less than or equal to 8.0.

Excellent: The weighted number of contaminated individuals is more than 4.0 but less than or equal to 6.0

Outstanding: The weighted number of contaminated individuals is less than or equal to 4.0.

Performance Measure Result

Berkeley Lab has no occurrences of unplanned radiation exposures nor significant skin or personal-clothing contamination for the current performance year to report in the occurrence reporting system (ORPS).



Objective #1
Criterion 1.3
Outcome Measure 1.3.c

Control of Radioactive Material: *Loss of control radioactive materials is managed and minimized.* **(Weight = 7.5%)**

Assumptions:

Off-normal occurrences have a weighting factor of 1, and unusual occurrences have a weighting factor of 1.5.

Some variability is expected, which may not indicate a trend.

This Measure is directed toward current management and control of radioactive materials.

Outcome Measure reports demonstrate how results are used to drive improvement or maintain current best-management practices.

Gradient:

Unsatisfactory: Little or no effort is demonstrated toward achievement of the Performance Measure.

Marginal: Some effort is demonstrated; however, results fall short of expectations for the “Good” gradient.

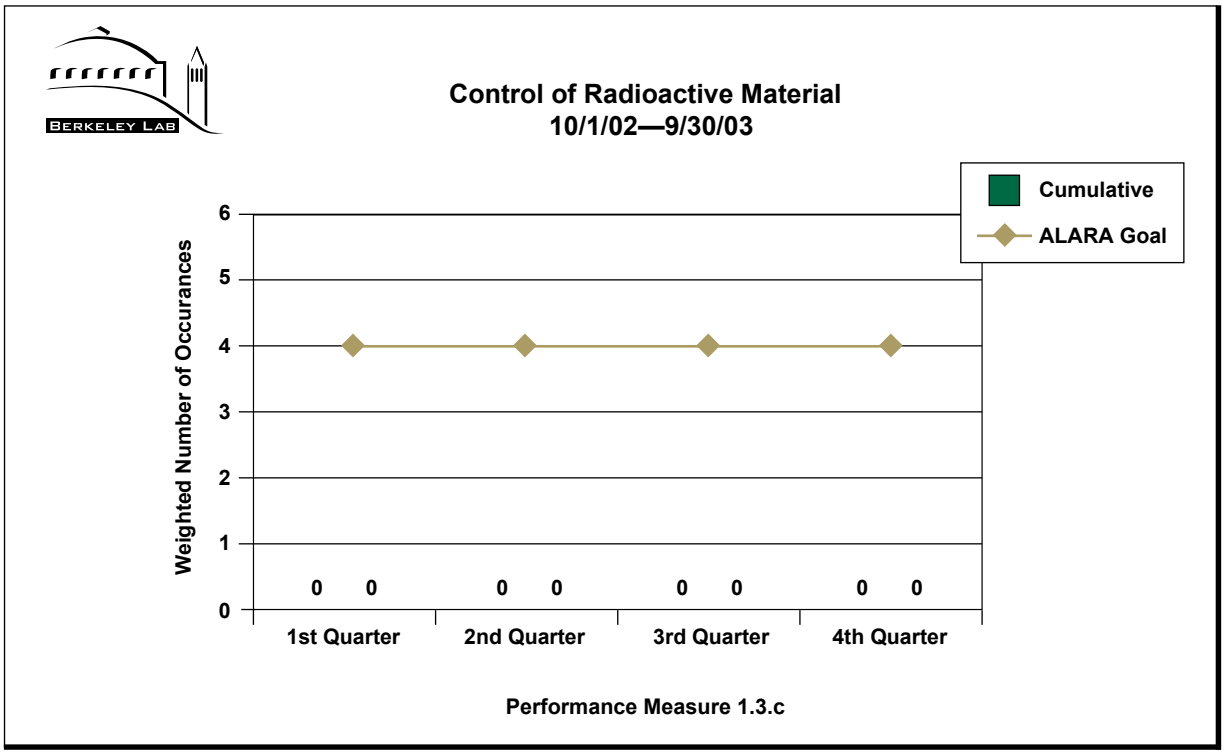
Good: The weighted number of occurrences is more than 4.0 but less than or equal to 6.0.

Excellent: The weighted number of occurrences more than 2.0 but less than 4.0.

Outstanding: The weighted number of occurrences is less than or equal to 2.0.

Performance Measure Result

Berkeley Lab has no ORPS-reportable occurrences of loss of control of radioactive material for the current performance year.



Objective #1
Criterion 1.3
Outcome Measure 1.3.d

Accident Prevention: *The baseline period for comparison is CY 1997 data. The Laboratory's severity and frequency [defined as Lost Workday Case Rate (LWC) and Total Recordable Case Rate (TRC), respectively] of accidents during the performance period are compared to the baseline period. The number of Bureau of Labor Statistics reportable occurrences of these accidents is tracked. A downward trend is expected as compared to the baseline year. The overall performance rating for this Measure factors in LWC and TRC rates and other accident prevention information identified below.* **(Weight = 7.5%)**

Assumptions:

Laboratory statistics are collected for the baseline for all Laboratory incidents, including subcontractors as reported to CAIRS.

For FY 2002 and future years, baseline assumptions are reviewed and, if appropriate, updated by mutual agreement between the local DOE office and the Laboratory.

Subcontractor operations/personnel are included for all subcontractors whose injury data are reported to CAIRS. Subcontractors are excluded if they are "servicing" the Laboratory (e.g., copy machine vendors or other transient workers).

The Laboratory's five-year goal for reduction of LWC and TWC is derived from the industry best-in-class Benchmarking Study completed in 1998 and in agreement with DOE.

Consideration is given to the Laboratory's rank for LWC and TRC within the best-in-class peer group.

Establishment and reporting of upper and lower control limits to determine the significance of accident rate variation (caused variation vs. random variation) are examined.

Consideration is given if any targeted/focused accident prevention program to a subpopulation within the Laboratory demonstrates effective intervention and/or improvement in the combined LWC and TRC score.

Consideration is given on demonstration of quantifiable return on investment (ROI) from implementation of accident prevention program initiatives.

Consideration is given to the rate of annual rate of reduction for LWC and TRC, using best in class as the benchmark and 1997 as the baseline year.

Overall rating of accident performance should be weighted toward higher recognition and credit for managing and reducing severity (LWC) of DOE recordable cases, due to LBNL's efforts to develop and implement multiple accident prevention initiatives early in the performance contract period. Therefore, the LWC has a weighting factor of 2 to 1 compared to the TRC.

If the DOE CAIRS reporting system changes during the performance year, data reported under the new system will be used after the effective date of the change. If the changes in the CAIRS system have an inequitable impact on this measure, the measure will be renegotiated at that time.

Gradient:

Progress toward reduction goals is evaluated using the following scoring system.

TRC between 3.00 and 2.25 = 1 point
TRC between 2.25 and 1.50 = 2 points
TRC below 1.50 = 3 points

LWC between 1.50 and 1.00 = 2 points
LWC between 1.00 and 0.50 = 4 points
LWC below 0.50 = 6 points

Unsatisfactory: Little or no effort is demonstrated toward achievement of the Performance Measure.

Marginal: Some effort is demonstrated; however, results fall short of expectations for the "Good" gradient.

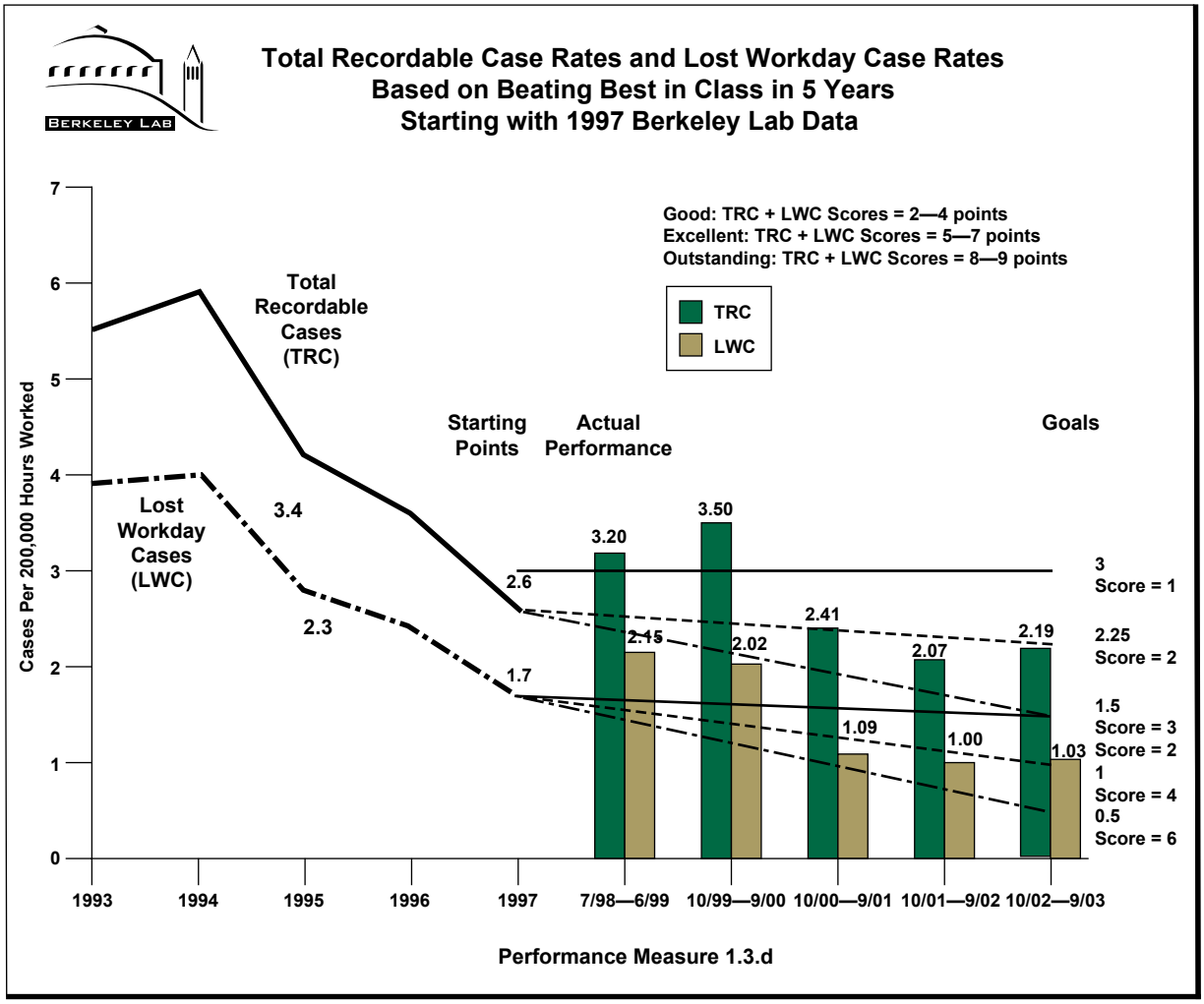
Good: Performance for LWC and TRC is scored and then summed. The sum for this gradient is 2 to 4 points, with consideration for demonstrated achievements identified within the list of assumptions.

Excellent: Performance for LWC and TRC is scored is then summed. The sum for this gradient is 5 to 7 points, with consideration for demonstrated achievements identified within the list of assumptions.

Outstanding: Performance for LWC and TRC is scored and then summed. The sum for this gradient is 8 or more points, with consideration for demonstrated achievements identified within the list of assumptions.

Performance Measure Result

Berkeley Lab's injury and accident rates from October 1, 2002, to July 31, 2003, are at the Good gradient: The total recordable case (TRC) rate is 2.19, which represents an Excellent rating; the lost workday case (LWC) rate is 1.03, which falls within the Good gradient. The 4-point total score amounts to an overall rating of Good; the scoring is subject to change as EH&S receives additional data during the last two months of the performance period.



Financial Management

Performance Characterization

Financial Services Management continued to demonstrate a high level of performance by successfully adapting to a changing environment during the fiscal year and by preserving a high-quality work ethic. Several changes took place that affected Financial Services Management, such as the implementation of a new Procurement/Receiving/Payables (PRP) System; the launching of a new grants system (called Research Administration, Proposal/Project Information Database, or RAPID); the institution of an accelerated DOE closing schedule; increased frequency and focus on audit reviews, and the conversion to a new banking service. Financial Services Management supported the changes, made the necessary adjustments, and continued to provide quality financial assistance for effective Laboratory operations.

Effective communications continued to be encouraged as a fundamental principle in financial operations. The Financial Network provided a forum for open discussion, issue resolution, dissemination of timely information, education, and training. Other informative communications, such as the Budget Formulation kickoff meeting, Year-End Close presentation, coordination of the Director's Budget Review, and the establishment of the Procurement/Receiving/Payables (PRP) Users' Group (PUG), were also provided during the year. The management report was prepared and submitted as scheduled to senior management, providing costs, trends, and annual forecasts for Laboratory operations.

An issue necessitating corrective measures in FY 2003 relates to the discovery of improper payments to an ESnet subcontractor. These payments have been recovered; however, the issues involved have required the Laboratory to strengthen financial-management procedures and controls for contractor invoice approvals and payments.

A second event was an internal audit during mid-2003 that disclosed approximately $76 million of capitalized fabrication assets booked between 1987 and 1998 that were not properly identified and reported in the general ledger. These assets have been reviewed for appropriate identification and disposition and have been accounted for accordingly. Fiscal-year-end balances accurately reflect fixed assets and related depreciation on LBNL financial reports.

Several areas of performance achieved excellent results this year. Effective vendor disbursements were maintained at an outstanding level; efforts to minimize the number of days to process receivables were successful; cost-accounting practices were within DOE guidelines; funds control was managed effectively; the DOE Budget Submission was prepared appropriately and submitted on time, as required; and the Functional Support Cost Report (FSCR) was completed and submitted on schedule.

Supporting data were also provided to the Department of Energy/Office of Management, Budget, and Evaluation (DOE/CFO Office) for a FSCR review, and Financial Services was commended for their assistance with this process. Regular and ad hoc reports were submitted as required, with accuracy and completeness, and on a timely basis. Electronic Data Interchange (EDI) was advocated as an efficient cost-saving mechanism.

Workforce development continued to be an essential part of the organization. Training on software and system skills, as well as financial processes and procedures, is encouraged and supported. Departmental training is also considered fundamental in meeting the financial needs of the Laboratory. Improved cross training resulted from an established 9/80 flexible schedule option.

For the purposes of this report, Financial Services Management represents the Controller's Organization

Preamble

Lawrence Berkeley National Laboratory (LBNL) will use the Financial Management Performance Assessment Plan (FMPAM) model for fiscal year 2003. The Financial Management organization has finalized its assessment plan with DOE and UC. This plan will cover performance thresholds, performance ranges, specific scoring criteria, and frequency of reporting.

In this Model, points are used to determine the score for each activity. Weights and the corresponding points are shown below at the Objective, Criteria, and Performance Measure Levels. Exhibit I summarizes the activities to be measured, performance ranges, and point value for each activity. The final rating will be based on the total activity points earned. The rating percentage will be calculated as a ratio of total points earned to total points possible (where a total weight of 100% is equal to 1,000 points).

General Note Regarding Gradients

All Performance Measures are rated as composites of numerous submeasures described in the protocol document. Points are earned for each submeasure. The submeasure points earned are totaled for each associated Performance Measure. The resulting Performance Measure score will be calculated as a percentage of total points possible. The following table illustrates the appropriate adjectival rating associated with percentage of points earned.

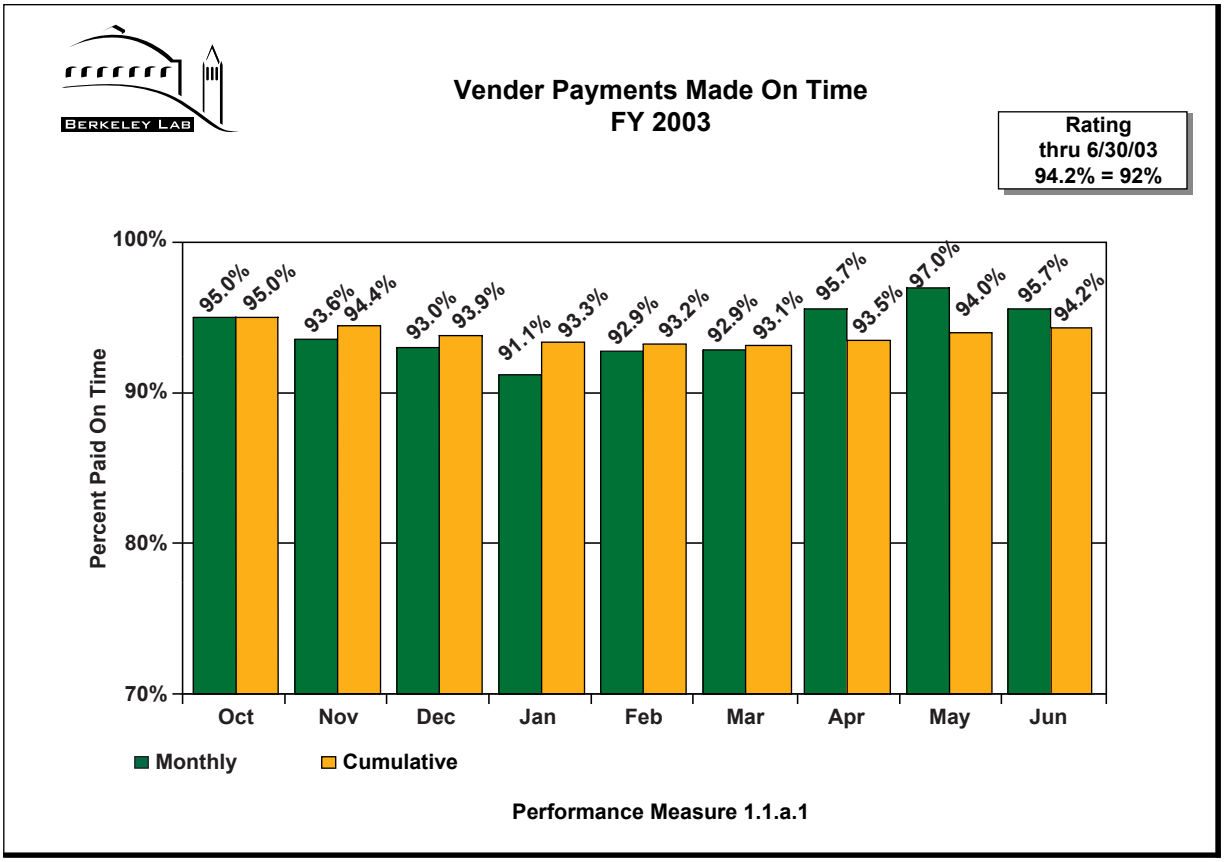
Percent of Points Earned	Rating
90–100%	Outstanding
80–89%	Excellent
70–79%	Good
60–69%	Marginal
59% or less	Unsatisfactory

Performance Objective #1	**Effective Accounting Practices:** *The Controller's Organization* shall ensure the accounting practices are effective, efficient, and according to generally accepted standards and principles.* **(Weight = 14.1% / Total Points = 141)**
Objective #1 Criterion 1.1	**Cash Management:** *The Controller's Organization shall have effective processes to disburse and collect government funds*. **(Weight = 2.5% / Total Points = 25)**
Objective #1 Criterion 1.1 Performance Measure 1.1.a	**Effectiveness of Disbursements:** *The effectiveness of vendor payment processes will be measured*. **(Weight = 1.2% / Total Points = 12)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 1.1.a.1	**Vendor Payments Made on Time.**
Performance Measure Result	The Laboratory has consistently maintained an outstanding performance level for this measure. Through the Third Quarter, 94.2% of vendor payments were made on time, compared to 98.5% for the same period last year. (The slight decrease was due to the learning curve involved with the implementation of the new Accounts Payable system and temporary contract labor coverage for a medical absence.)
Supporting Data	Available on request.



Performance Measure 1.1.a.2	**Customer Satisfaction Results:** *Feedback indicates customer needs are met.*
Performance Measure Result	This measure was successfully met each quarter for the first half of the year. Laboratory customers informally conveyed their appreciation for quality disbursement processes through personal comments, and formally by sending notes of gratitude to the Accounts Payable Department. Through the Third Quarter, approximately 22 notes of appreciation or approval were received. Customer satisfaction continues to be a fundamental guideline for quality performance in Financial Services Management.
Supporting Data	Available on request.

Objective #1
Criterion 1.1
Performance Measure 1.1.b

Effectiveness of Collections: *The improvement trends for collection of accounts receivable will be measured.* **(Weight = 1.3% / Total Points = 13)**

Basis for Rating

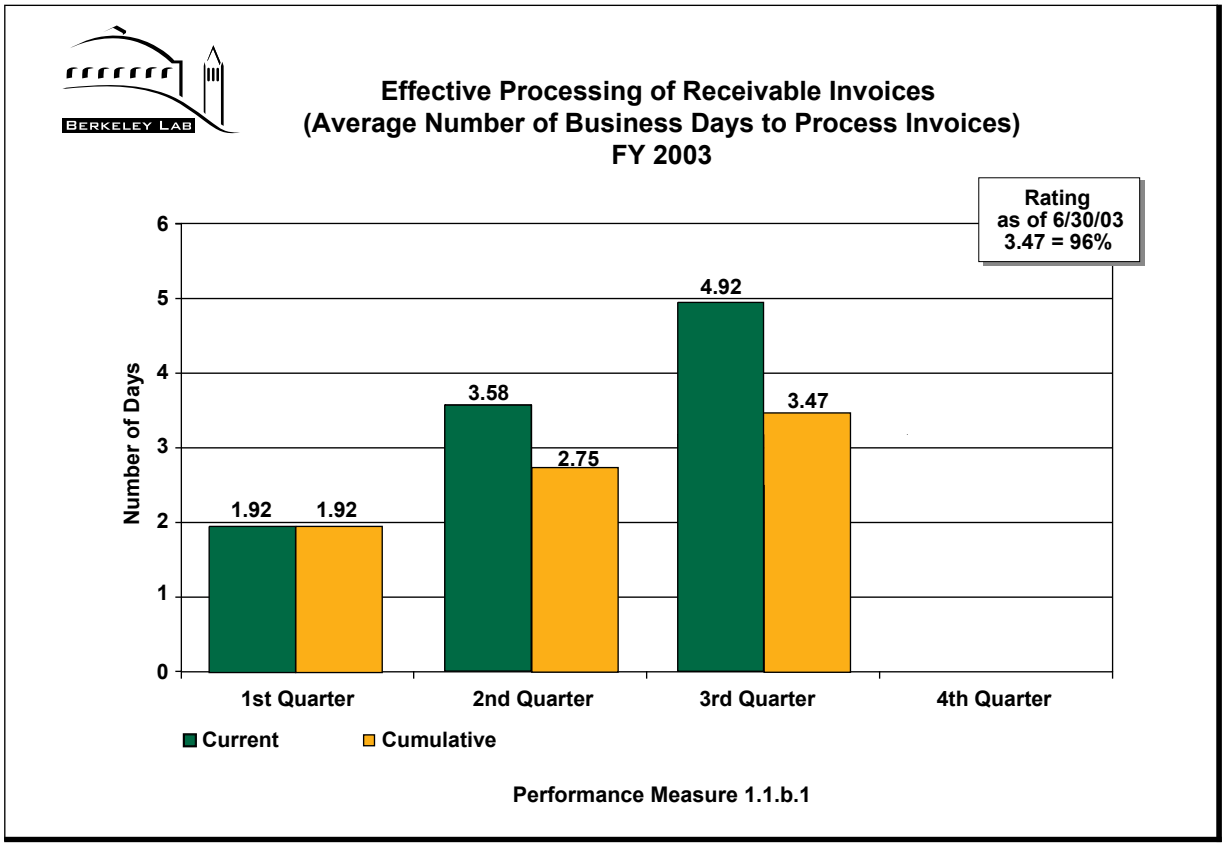
Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 1.1.b.1

Effective Processing of Receivable Invoices (Average Number of Business Days to Process Invoices).

Performance Measure Result

Through the Third Quarter, performance for this measure continued to be outstanding. Due to process and system improvements, the average number of business days to process and mail invoices was 3.47, compared to 3.03 for the same period last year. The calculation begins the day the ledger closes and concludes when all invoices are mailed or distributed.



Supporting Data

Available on request.

Performance Measure 1.1.b.2	**No Delinquent Nonfederal Receivables (>160 days).**
Performance Measure Result	For the First and Second Quarter, the Laboratory successfully ensured that there were no delinquent nonfederal receivables over 160 days. Diligent customer communications, along with ongoing reviews, provided a positive result for Financial Services. In the Third Quarter, there was one receivable over 160 days, the Ceylon Electric Board, which will be referred to DOE for cross servicing.
Supporting Data	Available on request.
Performance Measure 1.1.b.3	**No Delinquent Federal Receivables (>160 days).**
Performance Measure Result	This measure was successfully met during the First Quarter, as there were no delinquent federal receivables over 160 days. The Second Quarter resulted in two outstanding receivable invoices over 160 days for the Smithsonian Institute. Due to the implementation of a new system, the Smithsonian was unable to remit payment until June 3, when its system was fully functional.
Supporting Data	Available on request.

Objective #1 Criterion 1.2	**Account Management:** *Ensure that the Controller 's Organization effectively manages high-risk accounts.* **(Weight = 11.6% / Total Points = 116)**
Objective #1 Criterion 1.2 Performance Measure 1.2.a	**Work For Others (WFO) Accounts — Use of UC Bridge Funding:** *The Controller's Organization shall demonstrate effective management of UC financing of WFO.* **(Weight = 2.8% / Total Points = 28***)* **Basis for Rating** Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each.
Performance Measure 1.2.a.1	**The Laboratory Provides UC with Timely Information on UC Bridge Funding.**
Performance Measure Result	This measure was successfully met each quarter. The Laboratory provided timely payment reports on the use of bridge funding to UC. A report is submitted after each monthly close, with current and prior month bridge funding withholding totals from the UC management fee.
Supporting Data	Available on request.
Performance Measure 1.2.a.2	**The Laboratory Provides Department of Energy/Oakland Operations Office (DOE/OAK) with Timely Information on UC Bridge Funding.**
Performance Measure Result	This measure was successfully met each quarter. After each monthly close, a report that includes project details and the total amount of bridge funding used is prepared and submitted to DOE/OAK.
Supporting Data	Available on request.

Objective #1 Criterion 1.2 Performance Measure 1.2.b	**High-Risk Account Reconciliations:** *The Controller's Organization shall demonstrate effective accounting processes/results for high-risk account reconciliations.* **(Weight = 6.4% / Total Points = 64)**
Performance Measure 1.2.b.1	**Payroll Bank Account Is Reconciled within 20 Workdays after Receipt of the Account Reconcilement Report from the Bank.**
Performance Measure Result	This measure was successfully met. For each month, the Payroll Bank Account was reconciled within 20 days, with an overall average of 14.2 days.
Performance Measure 1.2.b.2	**Payroll Bank Account:** *Controllable reconciling items over 60 days old will not exceed 25% of the total controllable reconciling items. The 60-day time period will begin from the date that the reconciliation is completed.*
Performance Measure Result	This measure was successfully met. There were no controllable reconciling items over 60 days old that exceeded 25% of the total for the year to date. Of the 356 reconciled items, only four were over 60 days old.
Performance Measure 1.2.b.3	**Vendor Bank Account Is Reconciled within 20 Workdays after Receipt of the Account Reconcilement Report from the Bank.**
Performance Measure Result	This measure was successfully met for five months through the Third Quarter. Reconciliations were current and performed within 20 days of receipt of the bank reconcilement report. The other four months in which the measure was not met were primarily due to the conversion of a new banking service and the implementation of a new Accounts Payable system.
Performance Measure 1.2.b.4	**Vendor Bank Account:** *Controllable reconciling items over 60 days old will not exceed 25% of the total controllable reconciling items. The 60-day time period will begin from the date that the reconciliation is completed.*
Performance Measure Result	This measure was successfully met for October (no items over 60 days old) and November (three of 40 total items were over 60 days old). However, the remaining months through June did not result in meeting this measure. It should be noted that this was the result of extraordinary conditions resulting from the Laboratory's transition to a new banking system.
Supporting Data	Available on request.

Objective #1 Criterion 1.2 Performance Measure 1.2.c

Asset Management: *The Controller's Organization shall demonstrate effective accounting processes/results for asset management.* **(Weight = 2.4% / Total Points = 24)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each.

Performance Measure 1.2.c.1

Upon Approval from Property, Capitalize All Completed Capital Construction Projects No Later than the Next Monthly Accounting Period after Beneficial Occupancy.

Performance Measure Result

This measure was successfully met. Eight capital construction projects were completed through June that were capitalized no later than the next monthly accounting period after beneficial occupancy. The total cost of the projects was $3.2 million. Financial Services proactively communicated with Property Management to identify Construction Work in Progress (CWIP) projects/assets that may have been completed or did not have any new cost activity. Formal CWIP procedures are being developed to ensure adequate documentation and internal controls are in place for the timely capitalization of construction projects.

Performance Measure 1.2.c.2

Financial Management Participates in the Unified Project Call Process, which Ensures All Funding Determination Requests Are Evaluated and Prioritized for Appropriateness: *Funding is monitored for appropriate allocation and distribution.*

Performance Measure Result

This measure was successfully met. Financial Services Management participates in the Unified Project Call, which is initiated on an annual basis. The Unified Project Call provides divisions with the opportunity to submit their funding requirements for general plant projects (GPP) and general purpose equipment (GPE) to Laboratory management for the following year.

A representative from Financial Services Management participates in the GPP/GPE Review Committee meetings to review and prioritize all requests. The funding requests are assessed and prioritized, and a list of recommended projects is provided to Laboratory management and the Director's Action Committee (DAC) for funding determination.

Financial Services Management ensures that the approved funding is allocated to the appropriate projects for each division, and that the opening of new projects is reviewed and approved to ensure the application of appropriate fund types and burdens. The department also participates in monthly GPP meetings, monitors funding allocations and costs, and prepares a monthly GPE report for the appropriate divisions.

Performance Objective #2

Financial Stewardship: *The Controller's Organization practices provide for financial stewardship, including compliance, data integrity, and reporting.* **(Weight = 34.4% / Total Points = 344)**

Objective #2 Criterion 2.1

Financial Compliance: *The Controller's Organization shall demonstrate stewardship and compliance with DOE and federal accounting standards and policies*. **(Weight = 17.6% / Total Points = 176)**

Objective #2 Criterion 2.1 Performance Measure 2.1.a

Audit Results and Resolution: *The Controller's Organization will be measured on the audit results and resolution of audit findings*. **(Weight = 1.8% / Total Points = 18)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 2.1.a.1

Appropriate Targeting of Accepted Findings.

Performance Measure Result

Financial audits by the U.S. General Accounting Office (GAO), Office of the Inspector General (OIG), DOE, and Internal Audit are monitored and tracked in Financial Services Management. Open items are addressed, and timely resolution is targeted. Appropriate target dates were set for 100% of the accepted audit findings for Financial Management. Recommendations made by the following completed audits and reviews were targeted for resolution by FY 2003:

- Audit 2286, Billings and Accounts Receivable
- Audit 2302, Supplemental Review of Site Operating Contractor Overhead for FY 1999
- Audit 2323, Check Requests

Supporting Data

Available on request.

Performance Measure 2.1.a.2	**Appropriate Resolution of Accepted Findings.**
Performance Measure Result	As discussed previously, completed financial audits are monitored and tracked for accountability purposes. Resolution was met for 100% of the accepted audit findings for Financial Services targeted through June. The following audits/reviews had targeted recommendations that were resolved appropriately through the Third Quarter: • Audit 2286, Billings and Accounts Receivable • Audit 2323, Check Requests
Supporting Data	Available on request.

Objective #2 Criterion 2.1 Performance Measure 2.1.b

Internal Controls and Compliance on Subject Areas: *The Controller's Organization will be measured on the adequacy of their internal controls environment.* **(Weight = 3.6% / Total Points = 36)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 2.1.b.1

Self-Assessment Reports and Related Documentation, as Determined in Conjunction with DOE/OAK.

Performance Measure Result

Self-assessment reports and related documentation were 100% complete through the Third Quarter. The following items were identified by Berkeley Lab and DOE/OAK as self-assessment areas for internal controls and compliance in FY 2003:

- Resource adjustment procedures
- Office of Scientific and Technical Information (OSTI) procedures
- Fabrication procedures

Performance Measure 2.1.b.2

Appropriate Targeting of Self-Assessment Findings.

Performance Measure Result

Appropriate target dates were set for 100% of self-assessment findings.

Performance Measure 2.1.b.3

Appropriate Resolution of Self-Assessment Findings.

Performance Measure Result

Appropriate resolution was met for 100% of self-assessment findings.

Supporting Data

Available on request.

Objective #2 Criterion 2.1 Performance Measure 2.1.c

Cost Accounting Practices: *The Controller's Organization compliance with Cost Accounting Standards will be measured.* **(Weight = 7.2% / Total Points = 72)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 2.1.c.1

Indirect Rate Submissions Are Timely, Accurate, Complete, and in Conformance with Cost Accounting Standards (CAS), as Determined by DOE/OAK.

Performance Measure Results

This measure was met for each quarter to date for FY 2003. On September 3, 2002, the FY-2003 rate package was submitted to DOE/OAK. Cost Accounting subsequently consulted with DOE/OAK to discuss and review the FY-2003 rate submission. In the First Quarter, revisions were made to the payroll-burden rate and the proposed procurement field-buyer rate. The FY- 2003 rates were approved on October 30, 2002. Rates are monitored on a monthly basis for appropriateness and compliance.

In the Second Quarter, Cost Accounting met with DOE/OAK to advise of anticipated changes as a result of procurement card reviews. In addition, a request for a new recharge rate for Engineering was approved. Actual cost submissions will be based on a final decision by Laboratory management.

During the Third Quarter, four rate submissions were made to DOE for approval. These included a new recharge rate for Engineering, a revision of the safeguards and security rate, a request for a special rate for the Distributed Procurement Unit, and a change in the career payroll burden rate. The requests were submitted in a timely manner to DOE, following the approval of DAC.

Performance Measure 2.1.c.2

CAS Change Proposal Submissions Are Timely, Accurate, Complete, and in Conformance with the Agreed-Upon Requirements, as Determined by DOE/OAK.

Performance Measure Results

No CAS change proposals were submitted subsequent to the initial approval of the FY-2003 rates. The Laboratory considers its current accounting practices to be in compliance with CAS and DOE requirements.

Performance Measure 2.1.c.3	**CAS Disclosure Statement Is Current, Accurate, Complete and in Conformance with the Agreed-Upon Requirements, as Determined by DOE/OAK.**
Performance Measure Results	This measure was successfully met. The Laboratory's Cost Disclosure Statement was updated and submitted to DOE/OAK on November 7, 2002. The revisions reflected changes to the rates for procurement field buyers; Environment, Health and Safety (EH&S) Waste Management; additional expenses included in the payroll-burden cost pool; and the deletion of a design-works rate (not implemented). The CAS Disclosure Statement is considered to be in compliance with CAS and DOE requirements. Changes to the CAS Disclosure Statement were updated in the Third Quarter to further describe the Laboratory's accounting practices. It is anticipated that formal approval will be received from DOE/OAK.
Performance Measure 2.1.c.4	**Internal Customer Information Distribution Process Is in Place. Information Is Distributed to Customers on a Timely Basis (i.e., within Ten Workdays after Notification of DOE Approval).**
Performance Measure Results	This measure has been successfully met. In the First Quarter, division business managers were promptly notified of rate changes as required (within ten workdays after notification of DOE approval). In addition, the "Cookbook" was updated to include current rate information, which is available to financial personnel on the Web. There were no changes in the Second Quarter. In the Third Quarter, the Laboratory financial community was promptly notified of changes to approved rates. Changes to the safeguards and security rate and the new Engineering recharge rate were disseminated within ten workdays after notification of approval from DOE. The Laboratory proposed rates for the Distributed Procurement Unit and a payroll-burden rate increase for career employees. Formal notification of these changes will be made when approved by DOE.
Supporting Data	Available on request.

Objective #2 Criterion 2.1 Performance Measure 2.1.d

Accuracy of DOE Financial Statements: *Demonstrate effective accounting processes/results for accuracy of DOE financial statements.* **(Weight = 5.0% / Total Points = 50)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 2.1.d.1

DOE Balance Sheet Codes Reconcilations: *Timely reconciliation of key balance sheet accounts (i.e., cash, liabilities, advances and deposits).*

Performance Measure Results

Although reconciliations were completed for several accounts, the Laboratory determined that not all of the key balance sheet accounts were reconciled on a timely basis. The Laboratory did not meet this measure for FY 2003.

During a property review of fabrications conducted in FY 2003, it was discovered that there were capitalized assets recorded between 1987 and 1998 on the Laboratory balance sheet using capitalization methodologies that did not properly identify the assets at the time they were placed into service. The current accounting treatment of these assets may have resulted in the following financial statement impacts:

- Assets were initially overstated due to discontinued fabrications, which should not have been capitalized.
- Assets were also overstated due to disassembled assets, which were not removed from the balance sheet.
- Some assets are currently understated, as certain fabrications in use have no value on the balance sheet.

Performance Measure 2.1.d.2

The Laboratory Is Free of Material Government Management Reform Act (GMRA) Audit Findings.

Performance Measure Results

The measure was successfully met. One GMRA audit for FY 2003, Audit of the Department's Consolidated Financial Statements, is still in process. It is anticipated that this audit will not be completed until FY 2004.

Performance Measure 2.1.d.3	**Financial Statement Reports Address the Information Requirements Specified in the Appropriate Statement of Federal Accounting Standards (SFFAS) Pronouncement and/or DOE Guidance.**
Performance Measure Results	Financial Services Management prepared financial statement reports that address information requirements specified in the SFFAS declaration and/or DOE guidance. These reports are subject to reviews by the Office of the Inspector General (OIG); Klynveld, Peat, Marwick and Goerdeler (KPMG), and/or Internal Audit. The following are examples of financial statement and analysis reports submitted to DOE: • Accounts Receivable Aging Report • Statement of Costs Incurred and Claimed • Financial Statement Analysis
Supporting Data	Available on request.

Objective #2 Criterion 2.2

Financial Reporting: *The Controller's Organization will demonstrate effective reporting of financial information.* **(Weight = 10.8% / Total Points = 108)**

Objective #2 Criterion 2.2 Performance Measure 2.2.a

Internal Financial Management Reporting: *The Controller's Organization will be measured on the reporting of financial information to internal customers.* **(Weight = 3.8% / Total Points = 38)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 2.2.a.1

Monthly and Periodic Financial Management Reports are Accurate, Complete, and Meet User Needs (e.g., B&R Status Report, Guidance Report, KJ02 Report, Management Report, Reimbursable Work Order [RWO] Status Report).

Performance Measure Results

This measure was successfully met. Financial reports submitted internally were accurate, complete, and met users' needs. For example, the B&R Status Report is prepared each month and is considered a valuable tool for monitoring costs against funding by B&R category. The Management Report is also prepared for Laboratory senior management and is regarded as an extremely useful mechanism for which strategic financial decisions are made on behalf of the Laboratory. The KJ02 (Technology Transfer) Report is a useful internal report prepared for division financial personnel that reflects year-to-date costs against funding for KJ02 projects and provides a valuable means of effectively managing Technology Transfer costs.

Performance Measure 2.2.b	**DOE and Other External Laboratory Reporting:** *The Controller's Organization will be measured on the reporting of financial information to DOE and other external customers.* **(Weight = 7.0% / Total Points = 70)**
Performance Measure 2.2.b.1	**Timeliness of DOE Management Analysis Reporting System (MARS) Transmission:** *Scoring: Effective April 1, 2003, each timely submission with no more than three Laboratory edits (validity, combination, or balancing) from the published list earns 2 points. If monthly data transmissions pass all edits by 3:00 p.m. the 2nd business day, LBNL will receive an additional 3 points per month.*
Performance Measure Results	From April through June, the Laboratory earned 5 points for this measure. In April, more than three edits were required. In May, all requirements were met. In June, there were no more than three edits, but the transmission did not pass all of the edits by the second business day.
Performance Measure 2.2.b.2	**MARS Reporting Requirement Changes Implemented as Required by the DOE Schedule (B&R Recasts, OPI Codes, etc.):** *Meets = 95% of the new requirements implemented as scheduled.*
Performance Measure Results	This measure was successfully met. MARS reporting requirement changes, such as B&R recasts and other party identifier (OPI) codes, were implemented in accordance with DOE guidance. At least 95% of the total MARS reporting requirement changes were implemented as required for the year to date.
Performance Measure 2.2.b.3	**DOE Periodic Financial Reports:** *Meets = 95% of the total periodic reports as follows:* • Timeliness (4 points) • Accuracy (3 points) • Completion (3 points)
Performance Measure Results	At least 95% of the financial reports for DOE were either submitted early or on time through June. The reports were reviewed to ensure accuracy and completeness prior to submission. Financial Services Management received no requests to change or correct the reports; therefore, they were considered acceptable and complete.

Performance Measure 2.2.b.4

DOE Ad Hoc Financial Reports: *Meets = 95% of the total ad hoc reports, as follows:*

- Timeliness (4 points)
- Accuracy (3 points)
- Completion (3 points)

Performance Measure Results

This measure was successfully met. At least 95% of the DOE requests for ad hoc reports were submitted either early or on time through the Third Quarter. Prior to submission the reports were reviewed for accuracy and completeness. Financial Services Management received no requests to change or correct the reports; therefore, they were considered acceptable and complete.

Objective #2 Criterion 2.3

Standards and Principles: *The Controller's Organization shall have documented, effective internal controls and policies and procedures.* **(Weight = 6.0% / Total Points = 60)**

Objective #2 Criterion 2.3 Performance Measure 2.3.a

Financial Controls: *The Controller's Organization shall demonstrate the effectiveness of internal controls in primary accounting processes as identified with DOE.* **(Weight = 3.0% / Total Points = 30)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 2.3.a.1

WFO Account Management.

Performance Measure Results

Adequate Separation/Segregation of Duties Present

All WFO projects are reviewed for accuracy and compliance and are opened in the Financial Management System (FMS) by Financial Analysis/Budget. This supports adequate separation or segregation of duties by ensuring that project-opening activities are not part of contract activity and negotiation (performed by Sponsored Projects Office), or other WFO accounting activities (performed by General Accounting).

Similarly, General Accounting is responsible for opening all WFO contracts and billing in FMS. This supports the requirement of separation or segregation of duties. General Accounting is distinctly separated from both contract and negotiations (Sponsored Projects) and WFO project-opening activity (Financial Analysis/Budget).

Policies and Procedures Exist

Written documentation on project and contract opening is maintained by both Financial Analysis/Budget and General Accounting.

Alert Mechanisms to Identify Problems Exist

Written policy and procedures outline criteria for account opening and the review of funding fields. If the criteria are not met, the project will not be opened. A new contract must also comply with the criteria specified in the guidelines before it is opened.

Adequate Computer Security

Adequate computer security exists for WFO account-management activities. The process of opening projects and contract or billing functions is controlled in FMS through security tables, which are password protected.

Supporting Data

Available on request.

Performance Measure 2.3.a.2

UCDRD Account Management.

Performance Measure Results

Adequate Separation/Segregation of Duties Present

A University of California Directed Research and Development (UCDRD) status report is prepared monthly by General Accounting. The report is reviewed and approved by Financial Services management and submitted to Laboratory senior management. An account reconcilement is also performed each quarter on receipt of the statement from University of California Office of the President.

Requests for UCDRD funding are reviewed and approved by the Laboratory Directorate and submitted to Financial Services Management for appropriate action. General Accounting prepares the draw-down requests, issuance of the checks, bank reconciliations, and monthly status report. Financial Services Management approves the checks and draw-down requests. The bank reconciliation is reviewed and approved by the General Accounting Manager, following a first-level review for appropriateness by a senior-staff member.

Policies and Procedures Exist

The UCDRD account-management process is based on the DOE/UC Contract Funds manual. Another separate procedural document is maintained in Financial Services Management as a reference guide.

Alert Mechanisms to Identify Existing Problems

The review and approval process provides an appropriate alert mechanism so that any potential problems are identified as soon as possible, and that corrective action can be taken.

Adequate Computer Security

Computer security exists for the management of UCDRD projects. UCDRD projects are set up and managed in FMS, which is password protected.

Supporting Data

Available on request.

Objective #2 Criterion 2.3 Performance Measure 2.3.b

Financial Policies and Procedures: *The consistency, accuracy, completeness, and currency of financial policies and procedures will be measured.* **(Weight = 3.0% / Total Points = 30)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 2.3.b.1

Financial Policies and Procedures Are Accurate, Complete, and Current in Areas Assessed, and Are Available to Laboratory Organizations.

Performance Measure Results

This measure was successfully met. Financial policies and procedures are monitored regularly and were 90% accurate, complete, and current in areas assessed. They are available on the Financial Services Management Web site and can be accessed by Laboratory personnel.

For example, Laboratory fabrication procedures were assessed and accordingly updated to provide additional clarification on the process of opening and closing fabrication projects. The Cookbook, another document available on the Web, provides financial information on accounting, financial procedures, policies, and guidance, and a short reference list of current-year changes. The Cookbook, and the reference list of changes, was consistently maintained and updated by Financial Services Management. In addition, a new form for processing Requests for Issuance of Checks was updated and is also available on the Web.

Performance Measure 2.3.b.2	**Changes and/or Updates to Financial Policies and Procedures Are Communicated in a Timely Manner (i.e., within Ten Workdays of Final Publication).**
Performance Measure Results	This measure was successfully met during the year. Financial Services Management ensured that changes and/or updates to policies and procedures are conveyed to financial personnel within ten workdays of final publication or implementation. For example, during the First Quarter, FY-2003 rate changes were communicated to divisions within one workday of final approval. In the Second Quarter, division personnel were formally notified of the updated fabrication procedures described in Measure 2.3.b.1 several days prior to the effective date. The Cookbook was updated in the First Quarter, and the modifications were summarized in the "Changes" section for easy reference. In addition, Financial Network personnel were notified via e-mail about the new updated Request for Issuance of Check form as soon as it was available on the Web, well within the ten-day requirement. In the Third Quarter, e-mail notification of a potential increase in the payroll burden rate was disseminated to Laboratory financial personnel. As stated earlier, updated equipment-fabrication procedures were placed on the Financial Services Management Web site. The financial community was formally notified within ten workdays of publication. In addition, a formal presentation was made to the Financial Network to outline the updated procedures and to provide additional clarification.
Supporting Data	Available on request.

Performance Objective #3	**External Budget Products and Services:** *The Controller's Organization provides quality and appropriate budget formulation and execution products and services to external customers in support of their financial management systems, policies, and procedures.* **(Weight = 21.5% / Total Points = 215)**
Objective #3 Criterion 3.1	**Budget Formulation and Validation:** *The Controller's Organization shall provide budget formulation and validation products and services that facilitate effective financial management and stewardship of resources.* **(Weight = 5.0% / Total Points = 50)**
Objective #3 Criterion 3.1 Performance Measure 3.1.a	**DOE Budget Submission and Validation:** *The Laboratory's formal DOE budget submission and validation activities will be measured for proactiveness, timeliness, accuracy, completeness, and customer satisfaction.* **(Weight = 5.0% / Total Points = 50)** **Basis for Rating** Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 3.1.a.1

Proactivity and Customer Satisfaction: *The Laboratory Takes Proactive Steps to Ensure that the DOE Field Budget Submission and Validation Is Timely, Accurate, Complete, and Meets DOE/OAK's Needs.*

Performance Measure Results

Financial Services Management employed several proactive steps so that the DOE field-budget submission and validation was provided in a timely, accurate, and complete manner. Following discussions with DOE/OAK, a budget-formulation kickoff meeting was developed well in advance of the anticipated DOE budget-formulation guidance call and was presented to Laboratory financial personnel. The meeting served as a training session and provided the opportunity for discussion and review. The presentation included process guidelines, an overview of the federal budget cycle, data requirements, a detailed calendar, and supportive reference materials. In addition, a mandatory checklist was developed for division personnel to use as a guideline to ensure all of the required documents were submitted accurately and completely.

As an additional measure, all of the necessary budget submission forms and presentation materials were placed on the Web for easy access. Financial Services Management took proactive steps to communicate with the divisions, providing forms guidance, updated budget submission deadlines, and information and requirements from DOE, to ensure the field-budget submission was completed accurately and submitted to DOE on time.

The Laboratory's Web-based central budget preparation and project-planning database, Program Management Tracking System (PMTS), was used in the budget-submission process. PMTS automatically generates Field Work Proposals (FWPs) and Field Planning Proposals (FPPs) and consolidates data for submission to DOE. A detailed PMTS users' manual was developed and is available on the Web. The internal validation process was managed and controlled under the principle of providing quality assurance in a timely manner. Financial Services Management required that each FWP hard copy submitted be reviewed by the divisions using the checklist provided. A second review of each checklist was performed by Financial Services Management to ensure the completeness of required data elements. An electronic data export from the PMTS system was also provided to the divisions for a final assessment of accuracy and completeness. A summary report was also provided to the DOE Site Office and DOE/OAK. The same review process was performed for the required supplemental submissions and crosscut schedules for DOE submitted through Financial Services.

Financial Services Management is currently working with DOE to determine the formal budget validation parameters. It is expected that the validation process will take place in August.

Performance Measure 3.1.a.2

DOE Field Budget Submission: *Timeliness, Accuracy, and Completeness. The Laboratory's DOE field-budget submission exhibits and schedules are submitted to DOE timely, accurately, and with all schedules completed as prescribed in the DOE's guidance.*

Performance Measure Results

This measure was successfully met. The DOE field-budget submission exhibits and schedules were completed and submitted accurately, on time, and in accordance with DOE guidance. As indicated above, the primary materials and crosscut schedules were reviewed and evaluated to ensure accuracy and completeness. The appropriate fields of information were properly prepared according to published DOE guidance.

Objective #3 Criterion 3.2	**Budget Execution and Cost Management:** *The Controller's Organization shall provide budget execution products and services that facilitate effective financial management and stewardship of resources.* **(Weight = 16.5% / Total Points = 165)**
Performance Measure 3.2.a	**Control of Funds:** *The Laboratory's costs and commitments are controlled within established limits.* **(Weight = 9.0% / Total Points = 90)** **Basis for Rating** Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.
Performance Measure 3.2.a.1	**Laboratory Costs Are Within Cost-Control Levels at the End of Each Monthly Accounting Period for DOE Direct Funding.**
Performance Measure Results	Currently, this measure was successfully met. Financial Services Management initiated processes to ensure that costs were within cost-control levels for DOE direct funding on a monthly basis. To date, there have been no instances of costs exceeding direct funding.
Performance Measure 3.2.a.2	**The Sum of the Laboratory's DOE-Funded Costs and Commitments Do Not Exceed Available Funds at the B&R Obligational Control Level (OCL) at Year-End.**
Performance Measure Results	With the appropriate level of controls in process, it is expected that costs and commitments will not exceed available funds at the OCL level at year-end.
Performance Measure 3.2.a.3	**The Laboratory's Reimbursable WFO Costs Do Not Exceed Available Funds at the Reimbursable Work Order (RWO) OCL at Year-End.**
Performance Measure Results	It is expected that the Laboratory's Reimbursable WFO costs will not exceed available funds at the RWO level at year-end.

Performance Measure 3.2.a.4	**Laboratory Costs Are within Cost-Control Levels for all DOE Funding throughout the Year.**
Performance Measure Results	It is expected that effective control processes will result in costs maintained within cost-control levels for all DOE funding throughout the year.
Performance Measure 3.2.a.5	**Laboratory Costs Are within Cost-Control Levels for Reimbursable WFO Funding throughout the Year.**
Performance Measure Result	Financial Services Management does not anticipate successfully meeting this measure in FY 2003; however, progress has been made to improve processes and to address ongoing issues in this area. For example, cost and timing issues are currently being addressed while adhering to new processes and procedures implemented last year at the RWO level. Financial Services Management actively participated in the development and implementation of RAPID, which is a new system that supports the Laboratory's WFO research projects (grants applications).
Supporting Data	Available on request.

Objective #3 Criterion 3.2 Performance Measure 3.2.b

Reports, Submissions, and Requests: *The Controller's Organization's reporting of budget execution and cost management to DOE will be measured.* **(Weight = 7.5% / Total Points = 75)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 3.2.b.1

Functional Cost Report Is Timely, Accurate, and Complete as Determined by DOE.

Performance Measure Result

This measure was successfully met. A comprehensive Functional Support Cost Report was prepared by Financial Services Management in accordance with DOE guidelines and was submitted on time. During the Second Quarter, a formal on-site FSCR was conducted by the DOE/CFO Office. The Laboratory met with DOE auditors during their validation process to assist in verifying the data and in ensuring its accuracy and completeness. The DOE auditors commended the Laboratory for the professional and well-organized manner in which the materials were presented.

In FY 2001, Financial Services Management accepted an invitation from the Financial Management Systems Improvement Council (FMSIC) to participate as a member of the Functional Support Cost peer-review team. Financial Services Management continues to actively participate by designating a staff employee as a permanent team member, assessing functional-cost data for other DOE laboratories.

Performance Measure 3.2.b.2

Uncosted Balance Reports Are Timely, Accurate, and Complete as Determined by DOE.

Performance Measure Result

This measure was successfully met this year. The Uncosted Balance Report was submitted on time and prepared in an accurate and complete manner, in accordance with the procedures outlined by DOE. There were no requests for additional information, clarification, or changes to the report, all of which were considered adequate verification that the report was acceptable to DOE.

Performance Measure 3.2.b.3	**Regular and Ad Hoc and Miscellaneous Budget Execution and Cost Management Reports Are Timely, Accurate, and Complete as Determined by DOE.**
Performance Measure Result	Through the Third Quarter, all regular and ad hoc budget and cost reports were prepared in a timely and accurate manner and in accordance with DOE guidelines. There were no requests from DOE for verification, changes, or corrections; therefore, the reports were considered accurate and complete. The following are examples of budget and cost-management reports that were prepared and submitted either on time or early: • OSTI Report • WFO Cost Ceiling Report • Independent Centers Report • DOE Headcount and Travel Reports
Supporting Data	Available on request.

Performance Objective #4

Effective Decision Support and Organization Management: *The Controller's Organization provides appropriate business information and intelligence, expertise, analysis, reports, and organization management that enable effective decision-making processes and outcomes.* **(Weight = 19.0% / Total Points = 190)**

Objective #4 Criterion 4.1

Internal Planning, Reporting, and Analyses: *The Controller's Organization shall provide effective planning, reporting, and analytical decision support to its internal customers.* **(Weight = 19.0% / Total Points = 190)**

Objective #4 Criterion 4.1 Performance Measure 4.1.a

Effective Processes and Tools: *The Controller's Organization uses effective processes and tools that satisfy customer needs.* **(Weight = 14.5% / Total Points = 145)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 4.1.a.1

Financial Management Provides Effective, Value-Added Tools for Quality Analysis and Informed Decisions (e.g., Operating Plan, Institutional Forecast Summary for Director's Review, and the Institutional Plan Summary Report).

Performance Measure Result

Financial Services coordinated and organized the Director's FY-2004 Budget Review, which was conducted in May. Improvements in process, planning, and format resulted in the ability to present institutional forecasts for each division in a more effective and efficient manner. For example, the informational forecast overview was refined and customized in accordance with feedback received from prior reviews to provide a more value-added product. In addition, the presentations from each division were collected, consolidated, and formatted in advance of the meeting to streamline the process and minimize presentation delays. The Laboratory Director commented that he was pleased with the information provided and that it continues to improve each year.

One of the key Laboratory processes supported by Financial Services Management is the development and presentation of the Management Report (Operating Plan). The Management Report includes year-to-date costs and annual forecasts for each division, compared to actual cost trends for the prior year. The report is typically presented to senior management as requested during the Second and Third Quarters. After the presentation of the Management Report, a debriefing session is conducted to review discussions during the Management Report meeting and to plan for changes or enhancements in the next report.

The Management Report is well received by Laboratory senior management, who consider the report a viable process that provides quality information and an effective tool for sound financial decisions. The report was improved significantly last year to include a CD format with narration, enhanced graphics, and drill-down capabilities for additional detail. This year, additional enhancements were made to include recovery-by-division graphics and forecasts for Operations division and department heads. The new format continues to be highly regarded as a method in which to provide essential financial data for the Laboratory.

A key element in the Laboratory's strategic management planning is the *Institutional Plan*, which provides an overview of the Laboratory's mission, strategic plan, initiatives, and resource requirements. Resource requirements for funding and personnel were developed and submitted to the Laboratory's Office of Planning and Strategic Development as part of the final publication. Financial Services Management provided the required tables for funding and personnel projections by major programs in a timely and complete manner. The data provides institutional planning information for FY 2004 – FY 2008.

Performance Measure 4.1.a.2

Financial Management Supports Processes that Meet the Needs of the Laboratory (e.g., Training, Utilization of Effective Financial Systems, Rate Management, and Workforce Development).

Performance Measure Result

This measure was successfully met. Rate management is a vital part of effective financial processes that support the needs of the Laboratory. Indirect rates are continuously reviewed for appropriateness, and the Laboratory works closely with DOE to ensure compliance with DOE regulations and CAS.

Financial Services Management also communicates key information relative to the rate-management process. Several presentations on indirect-rate management and costs were made to senior management to provide and update rate development and related costs, i.e., rate structure and development for payroll burden, facilities use (space), and the procurement burden.

Financial Services Management also performs a monthly analysis that includes an annual projection of indirect costs, rates, and recoveries. The impact of cost projections against current rates are monitored and reviewed for appropriateness (e.g., payroll-burden rates were analyzed to determine the impact of increases in health insurance costs). Regular meetings are conducted with the Deputy Director for Operations to review current cost projections, rates, and the overall management of the Laboratory's indirect budget.

The Redbook continues to be a useful document in which to display key financial information, such as cost trends, status of indirect budgets, headcount, gross earnings, and full-time equivalent (FTE) data. The Redbook is consistently updated by Financial Services Management to reflect current information.

Training on financial processes and procedures, as well as software and system skill development, is actively supported at the Laboratory and is provided to employees on an ongoing basis. For example, a Web-based, self-guided course on unallowable costs and the federal budget process is available on an ongoing basis. FMS courses, such as Project Setup, Query, Web Reporting, nVision, Janus, and Resource Adjustments, are also provided throughout the year. In addition, a current version of the approved resource adjustment procedures is available on the Web as a reference guide.

Financial Services Management also regards internal departmental training as a fundamental part of workforce development, and necessary in meeting the needs of the Laboratory. A competent staff knowledgeable in financial processes and procedures, with the ability to provide quality financial information, is essential to employee development. Financial Services

Management staff have completed an average of 25 hours of training each. Opportunities for education and training are available and continue to be encouraged throughout the year.

Participation in meetings and conferences with other universities and laboratories is also supported. This enables the Laboratory to interact with other laboratory associates and to develop positive working relationships; it also fosters information-sharing and provides a forum in which to resolve issues and discuss ideas. Financial Services Management supports and participates in organizations such as FMSIC, the Business Management Information System (BMIS), Management Skills Assessment Program (MSAP), the DOE Accounting Officers Conference, Federal Financial Managers Conference, and the Annual DOE Budget Officers' Workshop.

The Financial Network includes all financial personnel; it was developed to provide the Laboratory financial community with a forum for information, communications, open discussion, and issue resolution. It also establishes a learning environment for education and training. Examples of informative sessions include training on the PMTS for budget formulation, the use of nVision Report Books, tutorials for new forms such as the Request for Issuance of Check (RFIC) form, and information about the accelerated month-end close.

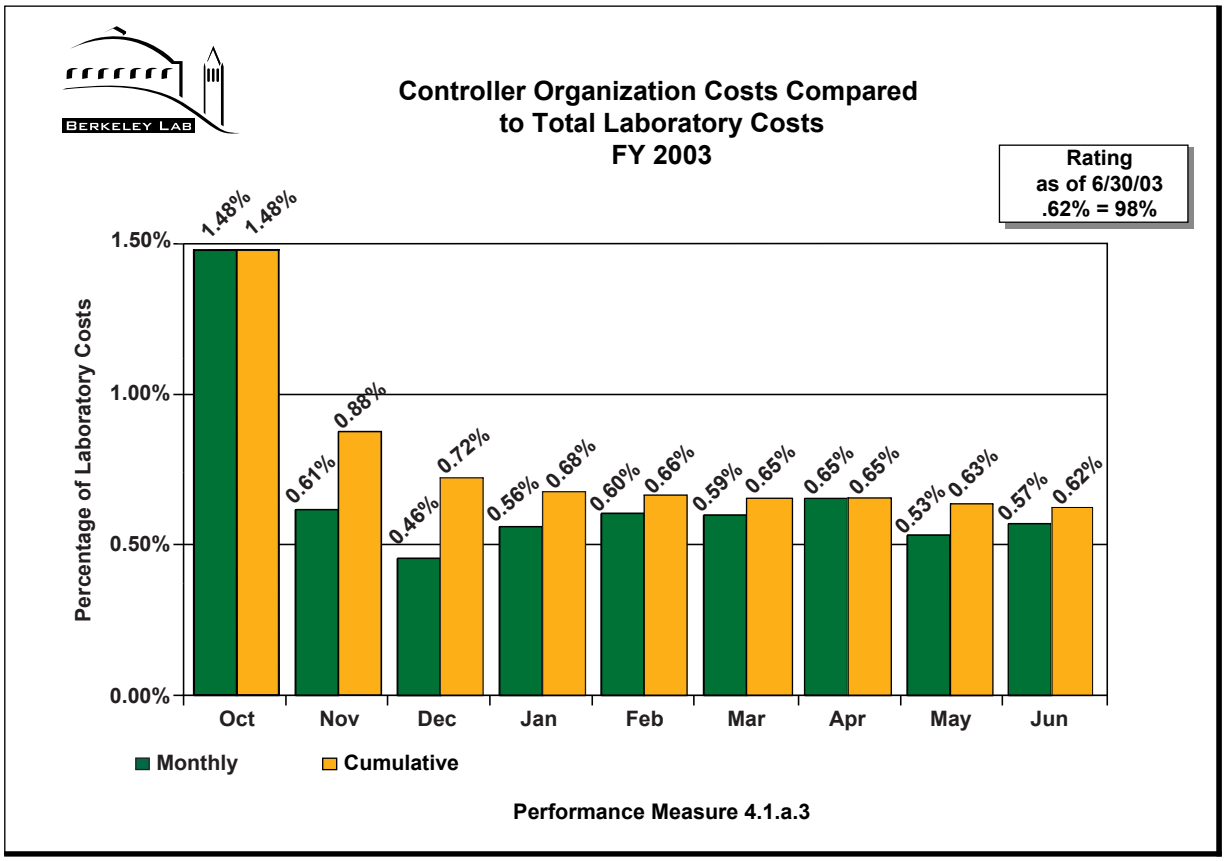
The Financial Network typically meets once each month. The Financial Network group is also advised electronically of timely communications and notifications involving relevant fiancial information. The development of the Financial Network is another process that effectively meets the financial-management needs of the Laboratory.

Performance Measure 4.1.a.3

Gauge: *Controller's Organization's Cost Trends Compared to Total Laboratory Costs.*

Performance Measure Result

For the first half of the fiscal year, performance for this measure was outstanding. Controller's Organization costs were managed successfully compared to total Laboratory costs. For the first nine months of the fiscal year, costs were controlled to only 0.62% of the total Laboratory costs, compared to 0.81% for the same period in FY 2002. (The increase in October was due to a significant reduction in total Laboratory costs. FY-2002 year-end accrual reversals and a decrease in October purchases were the major contributing factors.)



Supporting Data

Available on request.

Objective #4 Criterion 4.1 Performance Measure 4.1.b

Institutional Distributed/Indirect Budget and Rate Management: *The Controller's Organization institutional distributed/indirect budget and rate management activities will be measured.* **(Weight = 4.5% / Total Points = 45)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 4.1.b.1

The Laboratory Takes Proactive Steps to Ensure that the Institutional Indirect Budget Formulation and Execution Submissions and Periodic Reports Are Timely, Accurate, Complete, and Meet the Needs of Laboratory Management.

Performance Measure Result

The Laboratory successfully met this measure. Last year, the FY-2003 indirect budget was re-engineered using a different format: activity-based budgeting (ABB). The concept of ABB was to develop a budget in which to monitor costs for each activity that supports Operations and the Laboratory. The ABB format was used again for the FY-2004 institutional budget formulation process.

In the Third Quarter, the institutional indirect-budget call was provided to each Operations division. Financial Services implemented several activities to ensure that the Laboratory's needs were met by its indirect budget. Guidance for budget development was provided to Laboratory business managers and financial personnel to allow for ample time to complete the budgets for each division. Several informational meetings were held to review the requirements, address issues, and provide adequate support.

Each budget report submitted is reviewed for accuracy and completeness. Organization burdens and recharge rates are developed and analyzed for appropriateness, and a comprehensive budget-submission summary is submitted to senior management for review and presented to DAC for approval.

In a proactive effort to meet Laboratory management's needs, an analyst from Financial Services Management has been assigned to the Directorate to provide analyses, review funding allocations, and assist with the management of the institutional indirect budget. This has been a positive step in enhancing communications with and providing services to the Directorate.

Performance Objective #5

Effective Financial Management Systems: *The Controller's Organization will provide proactive leadership in improving financial information systems and decision support tools, in support of DOE and Laboratory initiatives.* **(Weight = 11% / Total Points = 110)**

Objective #5 Criterion 5.1

Effective Internal Systems: *The Controller's Organization will provide proactive leadership in improving financial information systems and decision support tools.* **(Weight = 6% / Total Points = 60***)*

Objective #5 Criterion 5.1 Performance Measure 5.1.a

Evolving to Meet Technology Advances: *The Controller Organization will demonstrate the effectiveness of the Laboratory's financial information systems and decision support tools in support of internal customer's needs.* **(Weight = 6% / Total Point = 60)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 5.1.a.1	**Customer-Driven Development Priorities:** *Customers are actively involved in system development priorities. Products and services provided are analyzed on a proactive basis.*
Performance Measure Result	This measure was successfully met. Financial systems, products, and services are developed with the active collaboration of Financial Services Management partners and customers. For example, the Laboratory's Procurement/Receiving/Payables (PRP) system was implemented last year with a significant level of teamwork and substantial customer input; needs assessment and business-process reviews were performed, and the establishment of teamwork significantly affected this system. This year, the Laboratory established PUG, whose mission is to foster open communications within the PRP user community, resolve issues, improve the efficiency and effectiveness of user requirements, and ensure that customers' needs are met.
Performance Measure 5.1.a.2	**Accuracy of Data:** *Internal controls are in place to ensure the highest level of accuracy within the financial system.*
Performance Measure Result	The Laboratory established effective internal controls to ensure that the information provided through financial systems was accurate, complete, and easily available to users. Financial Services Management works closely with Information Systems and Services (ISS) to provide a high level of reliable financial data for the financial community. Processes are in place to electronically validate the accuracy of FMS data. Another system, the Integrated Reporting Information System (IRIS), also uses data tables developed by FMS to provide accurate financial information for users on a timely basis, and is accessible on the Web.

Performance Measure 5.1.a.3

Internal Systems Strategic Planning: *The Laboratory has a process in place to prioritize and allocate resources for new systems development and to improve financial processes.*

Performance Measure Result

An effective strategic planning process is fundamental to improving financial systems and procedures to meet users' needs. The development of new financial systems is based on an annual prioritized list of requirements and resources, which is part of the Laboratory systems and project-planning process. The list (project charters) is created jointly by Financial Services senior management, ISS, and other Laboratory divisions and is submitted to Laboratory management for review and approval. An executive committee, the Enterprise Computing Steering Committee (ECSC), receives funding for priority systems, which are allocated to ensure that the required resources for developments and improvements are provided. The ECSC Committee and Laboratory senior management (department heads and division directors) are responsible for prioritizing funding allocations for Laboratory systems.

Accordingly, an annual Laboratory systems plan is prepared and submitted to DOE/OAK for approval. The plan includes a summary of system projects, guidelines, and application attributes.

Performance Measure 5.1.a.4

Software Security: *The Controller's Organization software is secure and is monitored on a regular basis.*

Performance Measure Result

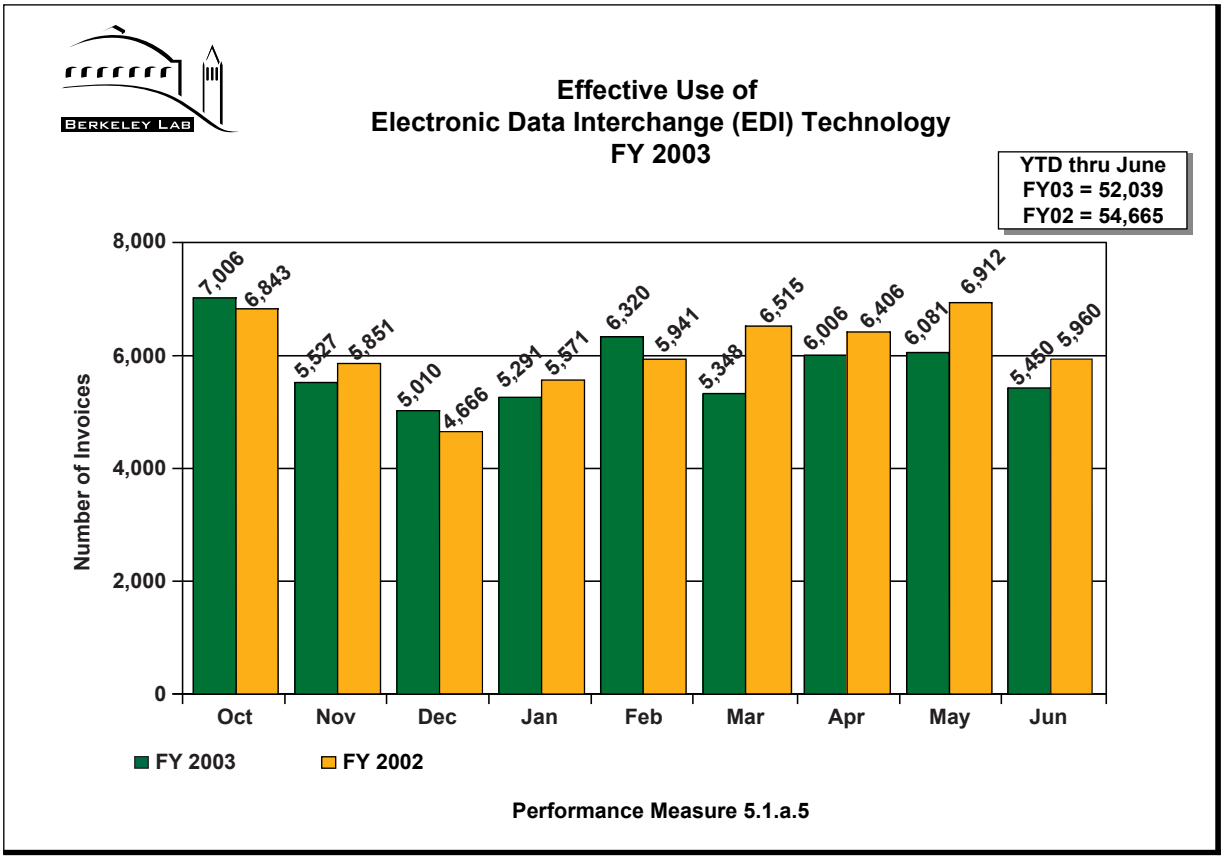
The security of application software is managed and monitored on a regular basis at the Laboratory. Financial Services, in association with ISS, administers and maintains software security for the Department, in accordance with the Regulations and Procedures Manual (RPM). In addition, a representative from Financial Services serves as a liaison to the Computer Protection Implementation Committee (CPIC), which meets approximately once per month to assist in developing, implementing, and administering Laboratory computer-security policies.

Performance Measure 5.1.a.5

Effective Use of Electronic Data Interchange (EDI) Technology: *EDI technology is used to its fullest potential, and the Laboratory actively seeks to expand its capabilities.*

Performance Measure Result

This measure was successfully met. The use of EDI technology continues to be promoted at the Laboratory. Although the use of ProCard decreased this year (along with a corresponding reduction of approximately 2,000 EDI payments), high-volume vendors are still encouraged to test for the implementation of EDI capabilities.



Objective #5 Criterion 5.2

Support of DOE Initiatives: *The Controller's Organization shall provide support to DOE initiatives related to relevant DOE Councils and major financial information systems.* **(Weight = 5% / Total Points = 50)**

Objective #5 Criterion 5.2 Performance Measure 5.2.a

Effectiveness of Support of DOE Initiatives: *The Controller's Organization shall demonstrate the effectiveness of the Laboratory's support to DOE management and information systems initiatives.* **(Weight = 5% / Total Points = 50)**

Basis for Rating

Exhibit I (at the end of this section) summarizes the activities to be measured, performance ranges, and point value for each activity.

Performance Measure 5.2.a.1

Support of Financial Management Systems Improvement Council (FMSIC) and the Business Management Information System (BMIS): *The Laboratory actively supports FMSIC and BMIS.*

Performance Measure Result

This measure was successfully met. The Laboratory actively supports the activities of FMSIC and BMIS. Financial Services Management was represented at the latest FMSIC/BMIS meeting in March. Current financial issues as well as key topics including e-commerce, cost-reduction strategies, Integrated Management Navigation System (I-Manage), and best practices were discussed. The Laboratory continues to attend FMSIC/BMIS meetings and to comply with applicable DOE requirements as appropriate.

Performance Measure 5.2.a.2

DOE Satisfaction with Timely FMS Plan Submission: *The FMS Plan was submitted on a timely basis and met DOE expectations.*

Performance Measure Result

This measure was successfully met. The FY-2003 Annual Systems Plan was submitted to DOE on time. The Laboratory received documentation that the plan was prepared appropriately as required. DOE provided some helpful guidelines, such as when to provide additional project detail, for future reports. As such, a proactive step was taken by the Laboratory to enhance the current report. A supplemental addendum providing further project detail for the Grants/RAPID project, Janus, and the Gelco Travel System was submitted to DOE, which acknowledged its appreciation for the additional information.

Performance Measure 5.2.a.3

DOE Satisfaction with the Laboratory's Coordination and Support of DOE Priorities and Long-Term System Initiatives: *DOE is satisfied with the Laboratory's coordination and support of DOE priorities and long-term system initiatives.*

Performance Measure Result

The Laboratory successfully accommodated the DOE requirement to revise the current closing timetable and to adopt an accelerated monthly close schedule. Provisions were made to redesign the closing process to comply with this requirement in fiscal years 2003 and 2004. The accelerated schedule expedites transmissions to DOE in order to meet financial-statement reporting requirements.

The electronic Portfolio Management Environment (ePME) project is a long-term system initiative that will manage, track, and report on R&D projects, combine information from other DOE systems, and integrate with Laboratory and field-office systems. The Laboratory supports this endeavor, and completion is estimated in three years.

In addition the Laboratory is proactively supporting the PeopleSoft financial system upgrade to accommodate I-Manage and the Standard Accounting and Reporting System (STARS) requirements. Laboratory financial staff participated in working groups, conferences, and meetings such as FMSIC and the Accounting Officer's meeting with DOE to facilitate the support of long-term initiatives.

Another DOE system initiative is the standard general ledger (SGL) conversion. Coding changes for these SGL requirements were completed during the June 2003 close. Remaining adjustments to opening balances are planned to be addressed in the July close. The Laboratory has taken an active part in this process, and progress continues to accommodate DOE requirements.

The following illustrates current organizational trends in four major areas of Financial Services Management:

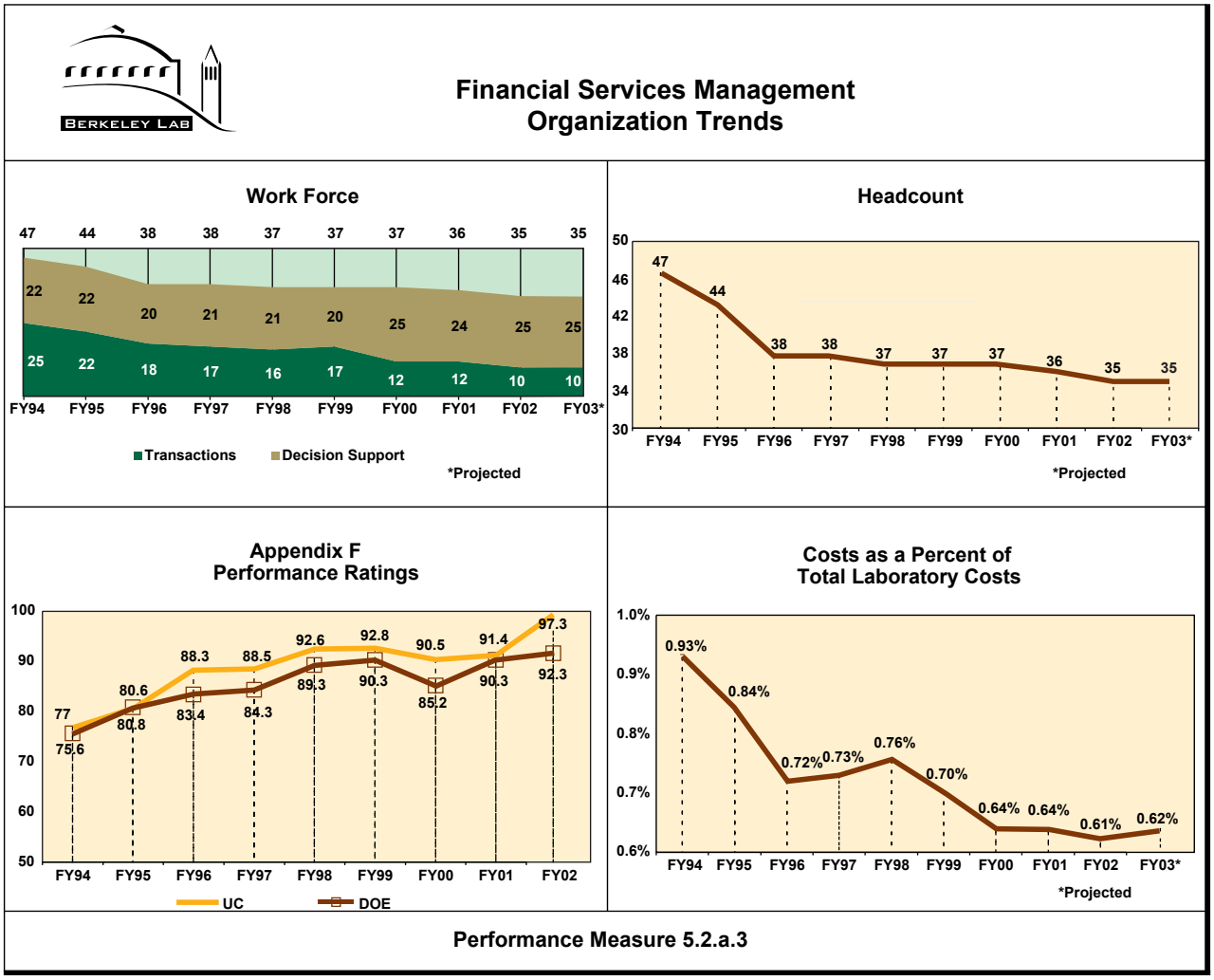


EXHIBIT I
LBNL FINANCIAL MANAGEMENT
FY 2003 SUB-MEASURES

Note: Gauge gradients are scored based on results during the assessment year. A percentage of points, from 100% to 50%, are earned based upon these results. Below a certain performance level, zero points are earned. The summary gauge gradients below show the performance levels to earn 0%, 50%, 60%, 70%, 80%, and 90% of points.

MEASURE	ACTIVITY	GRADIENTS	POINT VALUE
1.1.a	**Effectiveness of Disbursements**		**12**
1.1.a.1	Vendor payments made on time.	*Percentage of Points Earned* 0/50/60/70/80/90 *Performance Level (%)* ≥59.99/68.79/76.79/84.79/≤92.79	10
1.1.a.2	Customer satisfaction results.	Meets/Does Not Meet	2
1.1.b	**Effectiveness of Collections**		**13**
1.1.b.1	Effective processing of receivable invoices.	Meets/Does Not Meet	5
1.1.b.2	No delinquent federal receivables >160 days.	Meets/Does Not Meet	4
1.1.b.3	No delinquent non-federal receivables >160 days.	Meets/Does Not Meet	4
1.2.a	**Work For Others (WFO) Accounts — Use of UC Bridge Funding**		**28**
1.2.a.1	The Laboratory provides UC with timely information on UC bridge funding.	Meets/Does Not Meet	14
1.2.a.2	The Laboratory provides DOE/OAK with timely information on UC bridge funding.	Meets/Does Not Meet	14
1.2.b	**High Risk Account Reconciliations**		**64**
1.2.b.1	Payroll bank account is reconciled within 20 workdays after receipt of the Account Reconcilement Report from the bank.	Meets/Does Not Meet	16
1.2.b.2	Payroll bank account — Controllable reconciling items over 60 days old will not exceed 25% of the total controllable reconciling items. The 60-day time period will begin from the date that the reconciliation is completed.	Meets/Does Not Meet	16
1.2.b.3	Vendor bank account is reconciled within 20 workdays after receipt of the Account Reconcilement Report from the bank.	Meets/Does Not Meet	16
1.2.b.4	Vendor bank account — Controllable reconciling items over 60 days old will not exceed 25% of the total reconciling items. The 60-day time period will begin from the date that the reconciliation is completed.	Meets/Does Not Meet	16

FIN-50 Financial Management

MEASURE	ACTIVITY	GRADIENTS	POINT VALUE
1.2.c	**Asset Management**		**24**
1.2.c.1	Upon approval from Property, capitalize all completed capital construction projects no later than the next monthly accounting period after beneficial occupancy.	Meets/Does Not Meet	16
1.2.c.2	Financial Management participates in the Unified Project Call Process, which ensures all funding determination requests are evaluated and prioritized for appropriateness.	Meets/Does Not Meet	8
2.1.a	**Audit Results and Resolution**		**18**
2.1.a.1	Appropriate targeting of accepted findings.	*Percentage of Points Earned* 0/50/60/70/80/90/100 *Performance Level* *(% Targeted Dates Set)* <49/50/60/70/80/90/100	9
2.1.a.2	Appropriate resolution of accepted findings.	*Percentage of Points Earned* 0/50/60/70/80/90/100 *Performance Level* *(% Resolution)* <49/50/60/70/80/90/100	9
2.1.b	**Internal Controls and Compliance on Subject Areas**		**36**
2.1.b.1	Self-assessment reports and related documentation, as determined in conjunction with DOE-OAK. (DOE-OAK will determine if self-assessment reports and related documentation were complete.)	*Percentage of Points Earned* 0/50/60/70/80/90/100 *Performance Level* (% of Self-Assessment Reports and Related Documentation Requiring *Additional Information)* >51/50/40/30/20/10/0	18
2.1.b.2	Appropriate targeting of self-assessment findings. (DOE-OAK will determine if appropriate target dates were set and met for all self-assessment findings.)	*Percentage of Points Earned* 0/50/60/70/80/90/100 *Performance Level* *(% of Target Dates Set)* >51/50/40/30/20/10/0	9
2.1.b.3	Appropriate resolution of self-assessment findings. (DOE-OAK will determine if appropriate target dates were set and met for all self-assessment findings.)	*Percentage of Points Earned* 0/50/60/70/80/90/100 *Performance Level* *(% Resolution)* >51/50/40/30/20/10/0	9
2.1.c	**Cost Accounting Practices**		**72**
2.1.c.1	Indirect rate submissions are timely, accurate, complete, and in conformance with Cost Accounting Standards (CAS), as determined by DOE/OAK.	Meets/Does Not Meet	18
2.1.c.2	CAS change proposal submissions are timely, accurate, complete, and in conformance with the agreed-upon requirements as determined by DOE/OAK.	Meets/Does Not Meet	18
2.1.c.3	CAS Disclosure Statement is current, accurate, complete, and in conformance with the agreed-upon requirements as determined by DOE/OAK.	Meets/Does Not Meet	18
2.1.c.4	Internal customer information distribution process is in place. Information is distributed to customers on timely basis (i.e., within ten workdays after notification of DOE approval).	Meets/Does Not Meet	18

MEASURE	ACTIVITY	GRADIENTS	POINT VALUE
2.1.d	**Accuracy of DOE Financial Statements**		**50**
2.1.d.1	DOE balance sheet codes reconciliations. Timely reconciliation of key balance sheet accounts (i.e., cash, liabilities, advances, and deposits).	Meets/Does Not Meet	16
2.1.d.2	The Laboratory is free of material GMRA audit findings.	Meets/Does Not Meet	16
2.1.d.3	Financial Statement reports address the information requirements specified in the appropriate Federal Accounting Standard and/or DOE guidance.	Meets/Does Not Meet	18
2.2.a	**Internal Financial Management Reporting**		**38**
2.2.a.1	Monthly and periodic financial management reports are accurate, complete, and meet user needs.	Meets/Does Not Meet	38
2.2.b	**DOE and Other External Laboratory Reporting**		**70**
2.2.b.1	**Monthly MARS transmission is submitted to DOE/OAK on time**. Scoring: Effective April 1, 2003, each timely submission with no more than three Laboratory edits (validity, combination, or balancing) from the published list earns 2 points. If monthly data transmissions pass all edits by 3:00 p.m. the second business day, LBNL will receive an additional 3 points per month.	Meets/Does Not Meet	30
2.2.b.2	MARS reporting requirement changes implemented as required by the DOE schedule (B&R recasts, OPI codes, etc.).	95% = Meets	20
2.2.b.3	DOE periodic financial reports.	95% = Meets	10
2.2.b.4	DOE ad hoc financial reports.	95% = Meets	10
2.3.a	**Financial Controls**		**30**
2.3.a.1	WFO account management.	Meets/Does Not Meet	15
2.3.a.2	UCDRD account management.	Meets/Does Not Meet	15
2.3.b	**Financial Policies and Procedures**		**30**
2.3.b.1	Financial policies and procedures are accurate, consistent, complete, and current in areas assessed, and are available to Laboratory organizations.	*Percentage of Points Earned* 0/50/60/70/80/90/100 *Performance Level* *(% of Financial Policies and Procedures Accurate, Consistent, Complete and Current)* ≤49/50/60/70/80/90/100	15
2.3.b.2	Changes and/or updates to financial policies and procedures are communicated in a timely manner (i.e., within ten workdays of final publication).	Meets/Does Not Meet	15
3.1.a	**DOE Budget Submission and Validation**		**50**
3.1.a.1	Proactivity and Customer Satisfaction. The Laboratory takes proactive steps to ensure that the DOE field-budget submission and validation is timely, accurate, complete, and meets DOE/OAK's needs.	Meets/Does Not Meet	25

MEASURE	ACTIVITY	GRADIENTS	POINT VALUE
3.1.a.2	DOE Field Budget Submission. Timeliness, Accuracy, and Completeness. The Laboratory's DOE field-budget submission exhibits and schedules are submitted to DOE timely, accurately, and with all schedules completed as prescribed in the DOE's guidance.	Meets/Does Not Meet	25
3.2.a	**Control of Funds**		**90**
3.2.a.1	Laboratory costs are within cost-control levels at the end of each monthly accounting period for DOE direct funding.	Meets/Does Not Meet	42
3.2.a.2	The sum of the Laboratory's DOE funded costs and commitments do not exceed available funds at the B&R Obligational Control Level (OCL) at year-end.	Meets/Does Not Meet	15
3.2.a.3	The Laboratory's reimbursable WFO costs do not exceed available funds at the Reimbursable Work Order (RWO) OCL at year-end.	Meets/Does Not Meet	15
3.2.a.4	Laboratory Costs are within cost-control levels for all DOE funding throughout the year.	Nine additional points will be awarded at year-end if no instances of costs exceeding available funds at the cost-control level occurred during the entire fiscal year.	9
3.2.a.5	Laboratory costs are within cost-control levels for reimbursable WFO funding throughout the year.	Nine additional points will be awarded at year-end if no instances of costs exceeding available funds at the cost-control level occurred during the entire fiscal year.	9
3.2.b	**Reports, Submissions, and Requests**		**75**
3.2.b.1	Functional Cost Report is timely, accurate, and complete as determined by DOE.	Meets/Does Not Meet	25
3.2.b.2	Uncosted Balance Reports are timely, accurate, and complete as determined by DOE.	Meets/Does Not Meet	25
3.2.b.3	Regular and ad hoc budget and cost management reports are timely, accurate, and complete as determined by DOE.	Meets/Does Not Meet	25
4.1.a	**Effective Processes and Tools**		**145**
4.1.a.1	Financial Management provides effective, value-added tools for quality analysis and informed decisions (e.g., Operating Plan, Institutional Forecast Summary for Director's Review, and the Institutional Plan Summary Report).	Meets/Does Not Meet	50
4.1.a.2	Financial Management supports processes that meet the needs of the Laboratory (e.g., training, utilization of effective financial systems, rate management, and workforce development).	Meets/Does Not Meet	50
4.1.a.3	Controller's Organization cost trends. (Gauged Gradient)	*Percentage of Points Earned* 0/50/60/70/80/90 *Performance Level (%)* ≥1.59/1.58/1.38/1.20/1.00/≤0.80	45

MEASURE	ACTIVITY	GRADIENTS	POINT VALUE
4.1.b	**Institutional Distributed/Indirect Budget and Rate Management**		**45**
4.1.b.1	The Laboratory takes proactive steps to ensure that the institutional indirect budget formulation and execution submissions and periodic reports are timely, accurate, complete, and meet the needs of Laboratory management.	Meets/Does Not Meet	45
5.1.a	**Evolving to Meet Technology Advances**		**60**
5.1.a.1	Customer-driven priorities.	Meets/Does Not Meet	12
5.1.a.2	Accuracy of data.	Meets/Does Not Meet	12
5.1.a.3	Internal systems strategic planning.	Meets/Does Not Meet	12
5.1.a.4	Software security.	Meets/Does Not Meet	12
5.1.a.5	Effective use of Electronic Data Interchange (EDI) technology.	Meets/Does Not Meet	12
5.2.a	**Effectiveness of Support of DOE Initiatives**		**50**
5.2.a.1	Support of Financial Management Systems Improvement Council (FMSIC) and the Business Management Information System (BMIS).	Meets/Does Not Meet	20
5.2.a.2	DOE satisfaction with timely FMS Plan submission.	Meets/Does Not Meet	20
5.2.a.3	DOE satisfaction with the Laboratory's coordination and support of DOE priorities and long-term system initiatives.	Meets/Does Not Meet	10

Financial Management Supplemental Material

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FY 2003

Measure	Transaction	Jul	Aug	Sep	4th Quarter	Yr End Cum Avg
1.1.a.1	Vendor payments made on time	92.14%	93.66%	92.15%		93.76%
1.1.a.2	Customer satisfaction results				Met	
1.1.b.1	Effective Processing of Receivable Invoices (avg. no. days to process)				5.50	3.98
1.1.b.2	No delinquent non-federal receivables >160 days				Met	
1.1.b.3	No delinquent federal receivables >160 days				Met	
1.2.a.1	Laboratory provides UC with timely information on UC bridge funding	Met	Met	Met		
1.2.a.2	Laboratory provides DOE OAK with timely information on UC bridge funding				Met	
1.2.b.1	Payroll bank account is reconciled within 20 workdays	Met	Did not meet	Met		
1.2.b.2	Payroll bank account - controllable reconciling items over 60 days do not exceed 25% of total	Met	Met	Met		
1.2.b.3	Vendor bank account is reconciled within 20 workdays	Met	Met	Met		
1.2.b.4	Vendor bank account - controllable reconciling items over 60 days do not exceed 25% of total	Did not meet	Met	Met		
1.2.c.1	Capitalization of all completed construction projects				Met	
1.2.c.2	Financial Management participates in the Unified Project Call process				Met	
2.1.a.1	Appropriate targeting of accepted findings					94.4%
2.1.a.2	Appropriate resolution of accepted findings					92.9%
2.1.b.1	Self-assessment reports and related documentation, as determined in conjunction with DOE OAK					TBD*
2.1.b.2	Appropriate targeting of self-assessment findings					TBD*
2.1.b.3	Appropriate resolution of self-assessment findings					TBD*
2.1.c.1	Indirect rate submissions are timely, accurate, complete, and in conformance with CAS, as determined by DOE OAK				Met	
2.1.c.2	CAS change proposal submissions are timely, accurate, complete, and in conformance with agreed upon requirements, as determined by DOE OAK				Met	
2.1.c.3	CAS Disclosure Statement is current, accurate, complete and in conformance with the agree upon requirements, as determined by DOE OAK				Met	
2.1.c.4	Internal customer information distribution process is in place Information is distributed to customers on a timely basis (i.e., within 10 workdays after notification of DOE approval)				Met	
2.1.d.1	DOE balance sheet code reconciliations				0	0
2.1.d.2	The Laboratory is free of material GMRA audit findings					Met
2.1.d.3	Financial Statement reports address the information requirements specified in the appropriate Statement of Federal Accounting Standards and/or DOE guidance					Met
2.2.a.1	Monthly and periodic financial management reports are accurate, complete and meet user needs	Met	Met	Met		
2.2.b.1	Monthly MARS transmission is submitted to DOE/OAK on time	5.00	5.00	5.00		
2.2.b.2	MARS reporting requirement changes implemented as required by the DOE schedule	Did not meet	Did not meet	Did not meet		
2.2.b.3	DOE periodic financial reports 95% of the total periodic reports are timely, accurate and complete					Met
2.2.b.4	DOE ad hoc financial reports 95% of the total ad hoc reports are timely, accurate and complete					Met
2.3.a.1	WFO account management					Met

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Measure	Transaction	Jul	Aug	Sep	4th Quarter	Yr End Cum Avg
2.3.a.2	UCDRD account management					Met
2.3.b.1	Financial policies and procedures are accurate, complete and current in areas assessed, and are available to Laboratory organizations					Met
2.3.b.2	Changes and/or updates to financial policies and procedures are communicated in a timely manner (i.e.; within 10 workdays)	Met	Met	Met		
3.1.a.1	Proactivity and customer satisfaction DOE field budget submission and validation is timely, accurate, complete, and Met DOE/OAK's needs					Met
3.1.a.2	DOE Field Budget Submission The Laboratory's DOE field budget submission exhibits and schedules are submitted to DOE timely, accurately and with all schedules completed as prescribed in the DOE's guidance					Met
3.2.a.1	Laboratory costs are within cost control levels at the end of each monthly accounting period for DOE direct funding	Met	Did not meet	Met		
3.2.a.2	The sum of the Laboratory's DOE funded costs and commitments do not exceed available funds at the B&R Obligational Control Level (OCL) at year-end					Met
3.2.a.3	The Laboratory's Reimbursable WFO costs do not exceed available funds at the RWO Obligational Control Level at year-end					Met
3.2.a.4	Laboratory costs are within cost control levels for all DOE funding throughout the year					Did not meet
3.2.a.5	Laboratory costs are within cost control levels for Reimbursable WFO funding throughout the year					Did not meet
3.2.b.1	Functional Cost Report is timely, accurate, and complete as determined by DOE					Met
3.2.b.2	Uncosted Balance Reports are timely, accurate, and complete as determined by DOE					Met
3.2.b.3	Regular and ad hoc budget and cost reports are timely, accurate and complete as determined by DOE					Met
4.1.a.1	Financial Management provides effective, value-added tools for quality analysis and informed decisions					Met
4.1.a.2	Financial Management supports processes that meet the needs of the Laboratory				Met	
4.1.a.3	Controller's Organization cost trends compared to total Laboratory costs	0.58%	0.71%	0.38%		0.59%
4.1.b.1	The Laboratory's institutional indirect rates and collections are estimated accurately based upon the best information available Institutional indirect budgets and costs are monitored to ensure proper budget execution				Met	
5.1.a.1	Customer driven development priorities - Customers are actively involved in system development priorities Products and services provided are analyzed on a proactive basis					Met
5.1.a.2	Accuracy of data - Internal controls are in place to ensure the highest level of accuracy within the financial system					Met
5.1.a.3	Internal systems strategic planning - The Laboratory has a process in place to prioritize and allocate resources for new systems development and to improve financial processes					Met
5.1.a.4	Software security - The Controller's Organization software is secure and is monitored on a regular basis					Met
5.1.a.5	Effective use of Electronic Data Interchange (EDI) technology					Met
5.2.a.1	Support of Financial Management Systems Improvement Council (FMSIC) and the Business Management Information System (BMIS)					Met
5.2.a.2	DOE satisfaction with timely FMS Plan submission					Met
5.2.a.3	DOE satisfaction with the Laboratory's coordination and support of DOE priorities and long-term system initiatives					Did not meet

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Measure	Transaction	Jul	Aug	Sep	4th Quarter	Yr End Cum Avg
*Pending evaluation and determination from DOE						

Human Resources

Performance Characterization

Performance Objective	Title	Rating	Weight
1	Effectiveness of HR Operations	Outstanding	100%

Performance Objective #1

Effectiveness of HR Operations: *Human Resources programs, services, and processes support the operations and scientific mission of the Laboratory.* **(Weight = 100%)**

Summary

Starting in 2002, the Department of Energy's Office of Science (SC), in conjunction with the University of California Laboratory Administration Office (UCLAO) and Senior Laboratory Management, endorsed a shift in how the Laboratory should be managed by DOE and how the Laboratory's supporting infrastructure and services should be run.

In order to implement this new vision, Berkeley Lab launched an initiative to develop a certified Human Resources Management System over the next five years. The components of the certified system will consist of standards, self-assessment against the standards, certification, and peer review. Best-practices national standards for the self-assessment will be established for the following areas:

- *Recruitment:* System Metrics and Diversity
- *Retention:* Compensation and Employee Satisfaction
- *Development:* Performance Management and Competency Improvement
- *Labor and Employee Relations:* Work Climate and Labor Union Contract Management

During FY 2003, we focused on achieving significant progress in four areas:

1. *Recruitment System Metrics*, through participation in the Saratoga Institute survey.

2. *Compensation*, through the development of Best Practices Compensation standards.

3. *Development/Performance Management*, through the assessment of our annual Performance Review and Development process (PRD) and an analysis of development plans to identify top-priority training needs.

4. *Labor and Employee Relations/Work Climate*, through the establishment of Listening Forums and the implementation of a pilot Flexible Work Options (FWO) program.

In addition to these efforts, we have made significant progress in establishing a national process for Human Resources department accreditation. This process has the strong support of the University of

California and DOE Headquarters. We are also chairing the DOE Contractor's Human Resources Council task force for accreditation.

The program that Berkeley Lab is pursuing is very exciting and has the potential to be used throughout the DOE Laboratory complex.

While the Department has made great strides in reaching its goals for FY 2003, it is important to recognize that, for a substantial portion of this fiscal year, the Laboratory has been responding to a large number of audits. This has hindered our progress in some areas; but highlights the successes and accomplishments are represented in this document.

Objective #1
Criterion 1.1

Certified Human Resource Management System: *Human Resources will design, develop, and implement a certified Human Resource Management system based on the HR best-practices national standards, using an independent third party to validate the system.* **(Weight = 100%)**

Objective #1
Criterion 1.1
Performance Measure 1.1.a

Certified Human Resource Management System: *The Human Resources management system achieves certification against mutually agreed-upon best-practices national standards.* **(Weight = 100%)**

Assumptions:

1. It is expected that to accomplish this measure will be a multiple-year effort.
2. This objective is consistent with the HR five-year (FY 2003 – FY 2007) strategic plan.
3. A certified HR management system will include the following elements:
   - Requirements will be based on the DOE Office of Science (Card) principles of Line Management Accountability, National Standards, Oversight, Contractor Accountability, Vision, and Incentives.
   - Components of the certified system will consist of standards, self-assessment against the standards, certification, and peer review.
   - Best-practices national standards for self-assessment will be established for the following areas: Recruitment, Retention, Development, and Labor and Employee Relations.
4. The cycle for completing this activity will consist of the following phases: Assessment, Design, Development, Implementation, and Evaluation.

Gradient:

Unsatisfactory: Little or no effort is demonstrated toward achievement of the Performance Measure.

Marginal: Some effort is demonstrated; however, results fall short of expectations for the “Good” gradient.

Good: Best-practices national standards have been developed and a gap analysis completed for four areas under the mutually agreed-on project plan.

Excellent: In addition to the “Good” gradient, HR has developed a transition plan responsive to the gap analysis for two of the areas.

Outstanding: In addition to the “Excellent” gradient, HR has developed a transition plan responsive to the gap analysis for four of the areas.

Performance Measure Result

1. Recruitment System Metrics

In March 2003, the Laboratory participated in the Saratoga Institute Workforce Diagnostic System. We identified our industry comparisons as Research and Development in the Physical, Engineering, and Life Sciences, West Coast, Government/Regulated. This was the first year of participation, and these comparisons will form our baseline measures.

In Recruitment, we initially will be tracking the following metrics. Other metrics will be determined to support Workforce Planning and Retention standards.

Metric Title	Calculation	Target Range	Berkeley Lab Result (for FY 2003?)
Accession Rate	Total hires/regular headcount	19.8%	20.6%
Relocation Program Cost Factor	Total relocation program cost/total number of relocation program hires	$6,128	$1,339
Sign-On Bonus Factor	Total sign-on bonus cost/total number of new hires receiving sign-on bonuses	$6,264	$12,591
Time to Fill	Total days to fill/total hires	43 days	59 days
Offer Acceptance Rate	Total offers accepted/total offers extended	93.4%	85.9%
Filled Requisitions (percent)	Total filled requisitions/total requisitions	44.6%	53.6%

To see results in a key metric, Cost per Hire, we were required to submit all of following costs in order to participate.

- Advertising Hiring Costs: retrievable from the general ledger (GL)
- Agency Hiring Costs: retrievable from the GL

- Referral Bonus Hiring Costs: retrievable from the GL
- Relocation Hiring Costs: retrievable from the GL
- HR Recruiter Salary Costs: retrievable from the GL
- Travel Hiring Costs: travel costs are tracked in one expense code (40000) and do not differentiate between employee and nonemployee travel.

In response to the gap analysis of Berkeley Lab's actual performance versus the target range for our industry grouping, we have established the following plan. These and other metrics will be reviewed annually to determine their appropriateness.

1. We will begin capturing travel costs associated with the recruitment process in order to be able to calculate a Cost per Hire metric.

2. We plan to analyze and track why our performance on Sign-On Bonus Factor, Time to Fill, and Offer Acceptance Rates fall below the target range for our industry grouping.

3. We will also establish metrics to measure the relative "success" of our hires. Instead of assuming that everything went well after a hire, we need a systematic way of finding out what worked and what needs improvement in the hiring process. By gathering information about the relative "success" of the hire,

    - We can adjust our recruitment strategy. We can also change the mix of tools and / or the sources we use, as we learn which hires actually perform the best.

    - We can improve the quality of the delivery of our services as we get feedback from managers and applicants.

    - We might improve our retention rates. By continuing a relationship with a new hire for the first few months, the recruiter can help advise the hiring managers and help them understand how to keep the new hire challenged and motivated. To meet this need, a new employee placement process will be added to our new employee orientation program.

We cannot assume that the people we recruit turn out to be great performers. We have to find out. We can do this by

1. Identifying the top hires (and failures) through performance metrics.

2. Identifying which recruiters had the top (bottom) performers. We might want to reward recruiters for hiring "better" people.

3. Identifying the sources/tools that produce the best (worst) hires, and adjust our recruiting to take advantage of the sources that work.

4. Tracking manager and applicant satisfaction, and adjust our recruiting process to improve satisfaction.

5. Tracking new-hire retention to see if any recruiters have high (low) retention rates, and subsequently identifying recruiters and behaviors that improve retention.

We will use the following Quality of Hire metrics to track the success of our recruiting efforts, and use them to improve the quality of our hires.

1. *Individual performance metrics*. Looking at whether the people we hired this year outperformed those hired last year (in their job classification) on these internal performance metrics.

    a. Performance appraisal rating

    b. Average bonus / pay for performance awards

    c. Number of months until they are promoted

    d. Number of company awards or outside recognitions

2. *Manager satisfaction*. Surveys of hiring managers show a significantly higher satisfaction rate with the recruiting process this year, compared to last year. Satisfaction with

    a. Quality (competencies) of the hire

    b. Quality of the recruiters' responsiveness to managers' requests

    c. Response time to managers' requests

    d. Number of hires

    e. Job performance of the hire

3. *Applicant satisfaction*. Surveys show a significantly higher satisfaction rate on how they were treated during the recruitment process, this year compared to last year. Satisfaction with:

   a. The way the recruiter treated them

   b. The recruitment process

   c. The Laboratory. Has Berkeley Lab's image improved as a result of the recruiting experience?

4. *Retention rates of new hires*. The percent of hires that are still with Berkeley Lab after one year is higher this year than last.

   Compare the new-hire voluntary termination rates from one year to the next. Adjust for any "inflation" in overall industry retention rates.

5. *Salary escalation*. Are the starting salaries (adjusted for inflation) for this year's hires the same or lower than last years?

   Compare accepted offers, adjusted for salary inflation within position classifications for this year, compared to last years, to see if we are "over offering" in order to get desired candidates to accept the offers.

We cannot improve what we don't measure. It is important that we monitor the quality of hires as an indicator of our effectiveness in Recruitment if we are to be better at providing this service to Berkeley Lab.

2. Compensation

Berkeley Lab decided that the compensation program would be the first HR function to be submitted for review and certification by DOE and UCLAO as part of the Human Resources Management System Accreditation Program. The compensation program was chosen as the pilot for the following reasons:

- There are compensation standards identified in Appendix A of the Laboratory's primary contract with DOE that are used to measure performance under Appendix F of the contract.

- Berkeley Lab has established systems, programs, and measures that provide self-assessment and DOE assurance for the compensation standards identified in Appendix A.

- Berkeley Lab has incorporated programs that represent best-practices approaches in the compensation function. Examples include the development and implementation of the PRD component of the performance management program, and the completion and implementation of the job-validation initiative, resulting in a market-based pay philosophy and related pay-structure design.

On December 18, 2002, the DOE Oakland Operations Office (DOE/OAK) and UCLAO agreed on the approach of applying the standards identified in Appendix A for the compensation program certification. These standards are:

- A philosophy and strategy for all pay delivery programs
- A method for establishing the internal value of jobs
- A method for relating the internal value of jobs to the external market
- A system that links individual and/or group performance to compensation decisions
- A method for planning and monitoring the expenditure of funds
- A method for ensuring compliance with applicable laws and regulations
- A system for communicating the program to employees
- A system for internal controls and self-assessment.

On April 16, 2003, we presented the initial draft of the *Compensation Best Practices Model,* which established our approach in applying these standards at the Laboratory. On May 7, 2003, we received input from DOE and UCLAO that provided a gap analysis towards meeting these standards. On June 4, 2003, we submitted the final version, which addressed the gaps identified in May 2003. The final version is currently being reviewed by both DOE and UCLAO and constitutes our transition plan.

The final version of the *Compensation Best Practices Model* contains the following:

- *Introduction*. This provides an overview of the compensation program at LBNL. It includes the compensation program vision, an assessment of the current state of the program, and a preview of the desired state to support the vision.

- *Compensation Standards*. This provides a review of the programs in place to meet each of the standards. These sections also include the philosophy and process methodology for each of the standards.

- *Appendices*. This is the supporting documentation referenced in the *Model*.

The certification of the compensation program will serve as the model for future HR functional certifications.

3. Development/Performance Management: Assessment of Our Annual Performance Review and Development Process (PRD)

During FY 2002, Berkeley Lab conducted an assessment of performance management best practices, presented the results to senior management, and implemented the PRD program. During FY 2003, we conducted an assessment of the program to determine successes and areas for improvement.

During September and October of 2002, HR surveyed the Scientific and Operations division and department management for their input on the success of the new program, and to identify areas for improvements. Specifically, HR Center Managers met with their respective division directors to determine who within their organizations to survey for input, including division management, supervisors, etc. The survey results included the following:

Successes:

- The program was well received as a result of its being an interactive process.

- There was a strong emphasis on professional development and the establishment of goals.

- There was a requirement for mid-year reviews between supervisors and employees that increased supervisor/staff communication on goals and performance.

- Management liked the level of the training provided by Human Resources.

Improvements:

- The performance ratings needed clarification.
- Summary comments, publications lists, and a brief description of the position needed to be incorporated on the front page of the PRD form to facilitate the scientist and engineer review process.
- There were some concerns on the ease of the form's format and the multiple signature requirements.

As a result of this survey, we conducted a gap analysis and developed the following transition plan, which was implemented for this year's review cycle:

- Revised the very good, good, acceptable, marginal/requires improvement, and unsatisfactory rating definitions.
- Developed a Performance Rating Matrix tool to help managers select the appropriate ratings.
- Simplified the PRD form by combining multiple documents, i.e., the Accomplishments worksheet and PRD Planning worksheet, into one document.
- Added a publications section (for scientists and engineers only) and position description section to the first page of the Accomplishments worksheet.
- Revised the Environment, Health, and Safety (EH&S) performance standard.
- Moved the "Summary Comments" to the first page of the PRD.
- Made the electronic forms available in RTF for easier use across platforms, e.g., UNIX, Mac, etc.
- Consolidated the signature requirements.

The 2003 performance review process guidelines were sent to the Deputy Laboratory Directors, division directors, Operations Department Heads, and the HR leadership team in May. The Human Resources Service Centers have subsequently developed and provided training to Operations and the Scientific divisions. The PRDs will be reviewed with employees in the August through September timeframe. An assessment will again be conducted after this PRD review cycle.

4. Development/Performance Management: Conduct an Analysis of Development Plans to Identify Top-Priority Training Needs

In FY 2003, the Laboratory funded the establishment of an Employee Development function within HR to partner with divisions to create a continuous learning environment, to identify and establish employee and management development programs that enable the Laboratory to fulfill its scientific mission, and to ensure that training is provided across the Laboratory in a coordinated, cost-effective way. This function will serve as a "brokering agent" to coordinate the various training efforts undertaken by the divisions. In addition, by coordinating these efforts, we will be able to analyze what training has been taken in the past and help determine what training to offer in the future. For example, we have reviewed our American Management Association (AMA) training usage and have determined that a large number of the courses which Berkeley Lab staff have taken revolve around developing writing skills. With this knowledge, we can negotiate with the AMA to provide on-site writing classes.

An objective for the Employee and Organization Development function is to establish training plans and programs consistent with the specific development needs identified by division management, employees, and supervisors. As a means to accomplish this objective, HR conducted a review and analysis of FY-2003 division and employee development plans that were prepared as part of the annual performance review process. The review included all of the Scientific and Operations Division/Department development plans and a representative sample of several hundred individual employee development plans. A gap analysis of the results provided the starting point for developing an overall training plan. General themes identified were in the areas of communications, managing our work environment, and career and staff development. In particular, project-management skills were identified as a developmental area in both scientific and operations organizations.

In response to the analysis, a transition plan was developed and implemented. This includes the development and deployment of the following training programs:

- Project Management: new
- Project Team Orientation: new
- Managing in a Union Environment: ongoing
- Performance Review and Development Performance Feedback: redesigned
- Diversity Training: new
- Sexual Harassment: ongoing
- Managing Employee Conduct and Performance: ongoing

- Recruitment Training: new
- Whistle Blower Policy: new
- Workplace Violence and Assessment: new

Future initiatives include becoming an active participant and team member on the University of California Office of the President (UCOP) People Management Training Initiative, which is designing a systemwide supervisory and management training program. This program will be developed by a systemwide team over the next two years.

5. Labor and Employee Relations/Work Climate – Listening Forums

During the summer of 2002, ten listening forums were held in eight departments/divisions: Financial Services, Administration Services, Facilities, Engineering, Information Technologies and Services, Computational Research, NERSC, and Environmental Energy Technologies. Approximately 160 randomly chosen employees were invited to participate. Participation was voluntary, no attendance was taken, and the forums were facilitated by an outside consultant; about half of the invitees participated.

At each forum, set up by organizational unit, the same seven questions were asked of employees. A list of these questions is attached as supporting data.

The consultant analyzed the results from the forums and presented them to management on October 14, 2002. Each department head/division director prepared a gap analysis comparing the employee feedback with their ongoing or new efforts. By the end of November 2002, a "Management Response Forum" was held with the participants. HR Center Managers assisted in preparing the responses. Management used this forum to communicate the linkage between employee feedback and projects/initiatives within their organizations which were either under way, or activities planned for FY 2003, FY 2004, and beyond.

Some of the feedback was not specific to a particular organization and is being addressed by Laboratory management. As a result of the forums, the following actions are a sampling of what we have accomplished this fiscal year:

- A Flexible Work Option pilot has been established.
- Project Management Training has been established to help employees juggle multiple projects and provide a formal process for planning, execution, and decision making.
- "Today at Berkeley Lab" has been established to provide more communication with our staff.

- An awards committee has been established to provide clear guidance on our current awards program and to look at ways to broaden the program for wider participation.

- As part of the PRD assessment, ratings were clarified and tools were developed to aid supervisors and employees in determining the appropriate performance rating and in reviewing job-related competencies.

- An Employee and Organization Development function was established in HR to coordinate the need for more opportunity for training and professional development.

- We will continue to conduct Work Climate Assessments in the future.

Deputy Director of Operations Sally Benson's presentation highlighting the initial results is available on request.

6. Labor and Employee Relations/Work Climate – Flexible Work Options (FWO) Program

Research was conducted into best-practices standards, and a FWO program was identified as a key component in creating a work environment in which employees can perform their best work. This was also a finding from our own listening forums. A team of HR professionals representing every division and department of the Laboratory was formed to develop and implement a pilot program this fiscal year.

The team researched programs in place at other national laboratories and in companies considered among the best places to work in the nation. The team established guidance and policies for a number of different work options. Laboratory management decided to conduct a six-month pilot to understand the implications of the program on business operations and time reporting, and to establish metrics to determine the success of the program. In order to simplify the pilot, only the 9/80 work schedule option could be used.

Four divisions were selected to participate in the pilot. The participants were chosen based upon the following factors:

- EH&S: to measure impact on customer relations

- ITSD: to measure impact on customer relations

- FSD: to measure impact on customer relations

- NERSC: to measure impact in a production environment

The following metrics have been established to measure the success of the program:

- Absenteeism: for all organizations
- Turnover: for all organizations
- Customer Service: for all organizations except NERSC

At the conclusion of the program, a gap analysis will be conducted using the results from the metrics as well as through an evaluation by a professional HR consulting firm. Based on the results for the gap analysis, a transition plan will be developed for use in recommending future programs.

Successes/ Shortfalls

This year's self-assessment covers the following four areas:

1. *Recruitment System Metrics*: Definition for baseline and analysis
2. *Compensation*: Certified system proposal
3. *Development/Performance Management*: Assessment of the PRD process, and an analysis of development plans to identify top-priority training needs
4. *Labor and Employee Relations/Work Climate*: Listening forums and the Flexible Work Options (FWO) program.

We have established standards either through formal metrics (Recruitment), mutually agreed-on standards (Compensation), or best-practices assessments (Development/performance management and Labor and Employee Relations/Work Climate). In all four areas a gap analysis was completed, and a transition plan developed and in most cases implemented.

In addition, we have made substantial progress on establishing a formal relationship with a national organization, the Human Resources Certification Institute (HRCI), for Human Resources Department accreditation.

We believe that we have met the Outstanding gradient.

Supporting Data

- Letters of support to HRCI
- Presentation to the HRCI Board of Directors is available for review upon request.
- The *Compensation Best Practices Model* is available for review upon request.
- Employee Listening Forum Questions
- Employee Listening Forums, a presentation given at the November 11, 2002, Operations Quarterly Meeting by Sally Benson is available upon request.

Attachments

Department of Energy
Washington, DC 20585

MAY 29 2003

JUN 2003

Ms. Cornelia Cont, CAE
Director
Human Resource Certification Institute (HRCI)
1800 Duke Street
Alexandria, VA 22134

Dear Ms. Cont,

Ms. Margo Triassi, of the Department of Energy (DOE) office in Oakland, met with me to discuss the results of the May 1, 2003, meeting with you, Randy Scott (Lawrence Berkeley National Laboratory) and Sam Gibson (University of California Laboratory Administration Office). Based on this positive report, I wish to convey to you and the HRCI Board of Directors the very active interest of the DOE Headquarters, Office of Procurement and Assistance Management, in implementing an accreditation process such as that described in the Accreditation Proposal presented to you. We were very encouraged that HRCI was seriously considering the accreditation of Human Resources programs as a new business opportunity and service to the human resources community.

It is our belief that a Human Resource Management program accreditation could be applicable to many of the 30 plus DOE Contractors nationwide, particularly those similar to Lawrence Berkeley National Laboratory. As a direct expression of interest, the DOE Contractors' Human Resources Council has endorsed the formation of a task team on this topic. It is intended that this group will assist in addressing consistent application of the accreditation concept to interested DOE contractors.

We look forward to further discussions with you on the next phases of this project.

Sincerely,

Stephanie F. Weakley
Director,
Contractor Human Resources Division

cc: Margo Triassi, DOE-Oakland Operations Office
Richard Nolan, DOE-LBNL Site Office
John LaBarge, DOE- Office of Science
Randolph R. Scott, Lawrence Berkeley National Laboratory

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OFFICE OF THE SENIOR VICE PRESIDENT-
UNIVERSITY AFFAIRS AND
INTERIM VICE PRESIDENT-
LABORATORY MANAGEMENT

OFFICE OF THE PRESIDENT
1111 Franklin Street, 12th Floor
Oakland, California 94607-5200

June 9, 2003

Ms. Cornelia Cont, Director
Human Resource Certification Institute
1800 Duke Street
Alexandria, VA 22134

Dear Ms. Cont,

I am writing to you regarding your recent meeting with Randolph R. Scott, Head Human Resources, Lawrence Berkeley National Laboratory, Sam Gibson of our office, and Margo Triassi, Department of Energy-Oakland Operations Office. I wish to assure you and the Board of Directors of HRCI, of the very strong interest of the University of California Office of the President-Laboratory Management in engaging in the partnership described in the proposal presented to you by the Lawrence Berkeley National Laboratory.

It is our view that the concept of HR Department Accreditation represents a timely and innovative approach to HR Practice that will further our goal of implementing best practices. We look forward to participating in discussions of mutual benefits and challenges.

Please keep Sam Gibson informed of the next steps in creating this partnership for the future.

Sincerely,

Bruce B. Darling
Senior Vice President and
Interim Vice President

cc: Director Shank
Assistant Vice President Van Ness
Associate Vice President Boyette
Deputy Director Benson
Department Head Scott
Division Director McGraw

UCSF
University of California
San Francisco

Human Resources
Administration
3333 California St., Ste.305
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94143-0832
tel: (415) 514-2036
fax: (415) 514-3600

July 3, 2003

Ms. Cornelia Cont, Director
Human Resource Certification Institute
1800 Duke Street
Alexandria, VA 22134

Dear Ms. Cont:

Randolph R. Scott, Head Human Resources, Lawrence Berkeley National Laboratory presented the HR Department Accreditation proposal to the University of California Chief Human Resources Officers (CHRO). The CHROs represent all of the campuses, medical centers and laboratories of the University.

The CHROs support the concept of HR Department Accreditation and believe it will further professionalize human resources. We look forward to learning more about the next steps.

Sincerely,

Mike Tyburski
Director
CHRO Chair 2003 – 2003

cc: Associate Vice President Boyette, Office of the President
Associate Vice Chancellor Shimek, UC Davis
Assistant Vice Chancellor Brooks, UC Irvine
Assistant Vice Chancellor Cooper, UC Riverside
Assistant Vice Chancellor Davis, UC San Diego
Assistant Vice Chancellor Levin, UC Los Angeles
Assistant Vice Chancellor Lopez, UC San Francisco
Assistant Vice Chancellor Moers, UC Berkeley
Executive Director Murta, UC Davis
Director Cronk, UC Santa Barbara
Director Kramp, UC Merced
Director McQuitta, UC Santa Cruz
Director Monroe, UCOP Human Resources
Director Odato, UCSF Medical Center
Director Skinner, UCSD Healthcare
Director Thatcher, UC Irvine Medical Center
Senior Associate Director Speare, UCLA Wilshire Center
Associate Director Alvarado, UC Davis Health System
Department Head Scott, LBNL

The questions we asked Employees

- **Why do you work at the Lab?**
- **What would help you feel more satisfied with your job and work at the Lab?**
- **What could the Lab do to become the workplace of choice for all Lab employees?**
- **How can the Lab help employees achieve a better balance between their professional and personal lives?**
- **How would you like to be more involved or have greater influence at the Lab?**
- **What could be done within your team, Department, Division and the Lab that would promote a culture of civility, respect and trust here at Berkeley Lab?**
- **What types of contributions, efforts and accomplishments do you think should be recognized by your manager, your peers, and by the Lab?**

Self-Assessment Report for Fiscal Year 2003

Information Technology Infrastructure

Ernest Orlando Lawrence Berkeley National Laboratory

Performance Characterization

Performance measures were substantially reduced in the Information Technology area for FY 2003 as a result of DOE's Best Practices Study and changing DOE priorities. Two performance measures remain in the area, which is now called Information Technology Infrastructure: Customer Satisfaction and Protected Computer Environment. Customer Satisfaction is a mature measure, which has been in place since 1999. The Protected Computer Environment is a new measure for cyber security, which moves from compliance to performance measurement. Both measures meet the Outstanding performance criteria.

Performance Objective #1

Information Technology Infrastructure. *The Laboratory provides information technology infrastructure and services by meeting customer requirements and providing a protected computing environment that serves the open scientific mission of the Laboratory.* **(Weight = 100%)**

Summary

The Information Technologies and Services Division (ITSD) Help Desk continues to sustain a high level of customer satisfaction and service in all measured areas. The average customer-satisfaction responses increased to 9.68 (Outstanding), the number of "bad tickets" (those receiving a survey score of 5 or less) decreased to 4.65% (Outstanding), and the percent of calls handled by the Help Desk increased to 65.8% (Excellent).

The Berkeley Lab Computer Protection Program (CPP) met the standard for an Outstanding performance rating. CPP monitored damage and vulnerabilities, promoted awareness of responsibility, and deployed countermeasures based on cost and risk and evaluated by return on investment (ROI). Vulnerabilities were addressed. Line management and individual staff were made aware of vulnerabilities and accepted residual risk. Laboratory monitoring and risk-assessment practices demonstrated progress toward a "validated systems" approach to performance.

Successes/ Shortfalls

- Systems that allow ITSD to measure Help Desk effectiveness have now been in place for almost five years. This measurement process is mature and reliable. As a result, a great deal of data exist that are used to make course corrections when needed. In addition, the Laboratory looks forward to technologies and approaches that can enhance the solid base that has been created.
- CPP reviews and evaluates incidents weekly, identifying damages and calculating costs. CPP monitors vulnerabilities by continuously observing network activity through its intrusion detection system (BRO). CPP also scans the Laboratory's networks for vulnerabilities monthly, or more frequently as needed, for vulnerabilities associated with emerging exploits.
- CPP informs line management of vulnerabilities and associated protection issues through the Computer Protection Implementation Committee (CPIC). Cyber-security bulletins and alerts are distributed, and awareness is promoted through training and institutional communications. The Integrated Safeguards and Security Management (ISSM) Self-Assessment Survey provided additional awareness this year.

- Total program costs, including damages, have been minimized, and preventive measures have been adapted to the ever-changing threat environment. Each cyber-protection countermeasure is evaluated and rated for its effectiveness based on cost and risk, and is measured by ROI.
- Vulnerabilities have been addressed. Monitoring data, including scan data, have been used to inform line management, to adjust protection and awareness of individual responsibility, and to improve the risk-assessment model. ISSM Self-Assessment provided information on protection and vulnerabilities to line management and individual staff; this information improved awareness of vulnerabilities and residual risk.
- Laboratory monitoring and risk-assessment practices demonstrate progress toward a "validated systems" approach to performance. During the rating period, Berkeley Lab deployed a pilot system called NETS to gather systems information from a variety of sources within the Laboratory. NETS is based on the premise that collecting network information from multiple existing network sources, analysis of this information in near real time, and automatic adaptation of the network defense to guard against attack are the best approaches to validated systems.
- In addition, CPP participated in the development and monitoring of the ISSM Survey during the rating period, increased its technical Computer Security Training, and uncovered a vulnerability heretofore unknown to DOE sites, which resulted in action throughout the DOE complex and an investigation led by the DOE Inspector General's (IG) Cyber Crimes Unit.

Supporting Data

Average Help Desk customer-satisfaction ratings from 1999 through 2003 show steady improvement in all four individually measured areas, as well as in the customers' overall assessment of our efforts. Each customer who submits a request receives a Web-based survey, which evaluates the quality of service provided by the Help Desk. The results have leveled off, with the overall measurements increasing just slightly. In 1999, the first year a central Help Desk was formed, ratings were low; since then, an increase in each of the survey areas has been observed, indicating that we have successfully improved our level of service.

- Berkeley Lab Cyber Security Self-Assessment, September 24, 2002
- ISSM Self-Assessment
- CPP Weekly Incident Reports
- Scanning Results Web site (http://www.lbl.gov/ITSD/Security/Scans/)

Objective #1 Criterion 1.1

Customer Satisfaction: *Evaluation of the degree to which the Laboratory's IM products and services meet customer requirements.* **(Weight = 50%)**

Objective #1 Criterion 1.1 Performance Measure 1.1.a

Level of Customer Service: *Evaluation of customer service reviews and implementation of activities toward improvement.* **(Weight = 50%)**

Assumptions:

1. Measurement deliverable: results of the customer service metrics.
2. The agreed-to Information Management areas to be addressed by this Performance Measure:
   - CIS–Desktop Support
   - Average satisfaction overall from Help Desk ticket survey — stable above 9.0 out of 10 or increasing
   - Percent of tickets with response to any survey question of 5 or lower out of 10 — decreasing
   - Percent of help tickets resolved by Help Desk at "first touch" — increasing

Gradient:

Unsatisfactory: No results are demonstrated, and little or no effort is expended in establishing effective processes toward achievement of the Performance Measure.

Marginal: Results fall short of expectations for the "Good" gradient; however, some effort is made to establish effective processes

Good: A systematic approach exists to the measurement of customer service. Evidence exists of meeting commitments to customer's requirements.

Excellent: Cost-effective and/or innovative approaches exist to measuring customer satisfaction, customer involvement throughout life cycle of information management activities, and evidence of improvement in customer service.

Outstanding: Sustained high level of customer service.

Performance Measure Result

The results of these measurements indicate that ITSD continues to maintain a high level of customer service in all areas: 3,637 Laboratory customers used the service from July 2002 through June 2003, generating 19,779 requests for help that resulted in a ticket. In any given month, over 1,000 different users have reason to contact us.

The average customer-survey response continues to increase slightly to 9.68 (which is rated Outstanding); the number of "bad" tickets continues to decrease to 4.65% (Outstanding); and the percent of calls handled by the Help Desk increased to 65.8% (Excellent).

Successes/ Shortfalls

Systems that allow ITSD to measure its effectiveness have now been in place for almost five years, resulting in a mature and reliable measurement process that has generated a great deal of data, which the Laboratory uses to make course corrections when needed. In addition, Berkeley Lab now looks forward to technologies and approaches that can enhance this solid measurement foundation.

Supporting Data

Help Desk customer service is assessed by each customer who submits a request for help. When the problem is resolved, an automatic confirmation is sent to the user via e-mail. Contained in the message is a link to a Web-based survey, which asks the customer to assign a value from 0 to 10 (10 being the highest) to four specific questions and an overall evaluation of the services they received. In 1999, the first year a central Help Desk was formed, ratings were low. Since then, an increase in each of the five areas has been observed, indicating that the effort to improve our level of service has been successful.

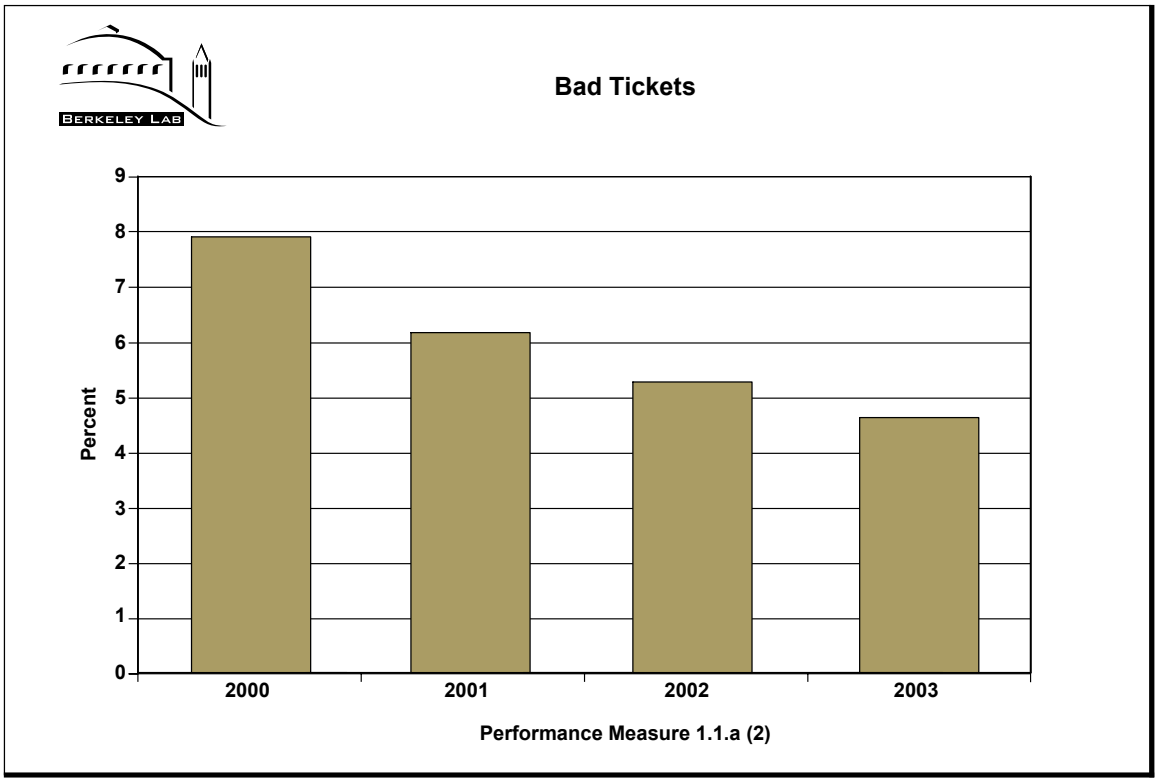
Average customer-satisfaction ratings from 1999 through 2003 show steady improvement in all four assessment areas, as well as in customers' overall assessment of our efforts. The results have leveled off, with the overall measurements increasing just slightly.

At this time, it is unnecessary to invest in the resources necessary to make major improvements in these assessment areas, as they are already marked by high levels of performance; it is more important to maintain these levels of satisfaction and to continue improving Help Desk customer service rather than to expect significant change.


Customer Satisfaction
12
10
8
6
4
2
0
Rating
FY99
FY00
FY01
FY02
FY03
Ease of Contact
Professionalism
Commitments
Time to Resolve
Overall
Performance Measure 1.1.a (1)

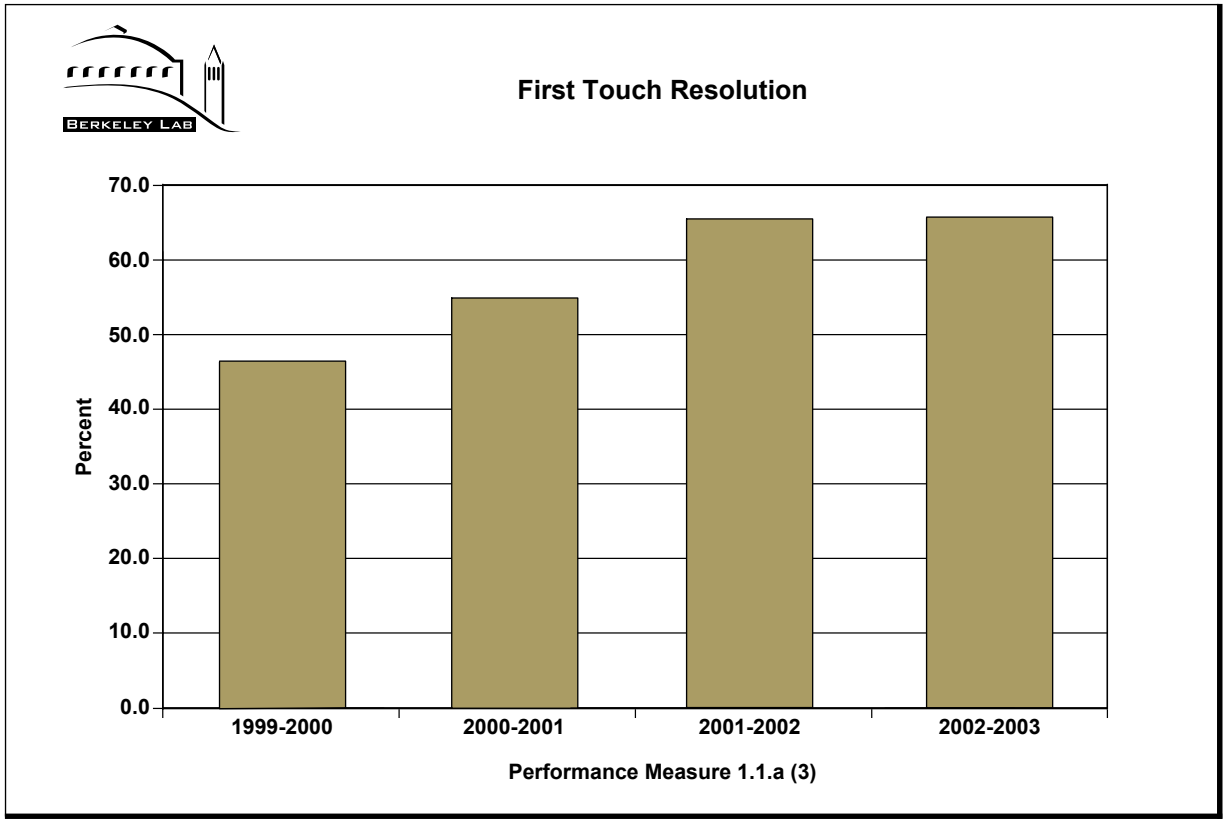
Very few customer surveys indicated a serious problem: 4.65% of tickets for which a survey was returned were classified as "bad," which is an improvement from the prior year.

Summary Statistics	
Period	**% Surveys**
99–00	7.9
00–01	6.2
01–02	5.3
02–03	4.65



Monthly call-resolution rates for the Help Desk averaged approximately 65.7%, maintaining a high level of performance. Lack of turnover in the Help Desk staff, continued emphasis on internal training, and a better electronic knowledge base are responsible for the improvement.

Summary Data	
Period	**Percent Resolved**
99–00	46.5
00–01	55.0
01–02	65.7
02–03	65.9



Objective #1 Criterion 1.2

Protected Computer Environment (Weight = 50%)

Objective #1 Criterion 1.2 Performance Measure 1.2.a

Protected Computer Environment: *Evaluation of the effectiveness of the Laboratory's Cyber Protection Program (CPP) in providing a protected computing environment by deploying cyber protection measures based on cost and risk.* **(Weight = 50%)**

Assumptions:

1. CPP develops quantifiable assessment data.
2. CPP deploys effective countermeasures based on cost and risk using the Laboratory's risk-assessment model.
3. CPP monitors damage, identifies and addresses vulnerabilities, promotes awareness and responsibilities, and informs line management.

Gradient:

Unsatisfactory: No results are demonstrated, and little or no effort is expended in establishing effective processes toward achievement of the Performance Measure.

Marginal: Results fall short of expectations for the "Good" gradient; however, some effort is made to establish effective processes.

Good: A systematic approach to monitoring damage, vulnerabilities, and awareness is deployed. Evidence that monitoring data from the risk-assessment model is used to inform line management of protection issues. Vulnerabilities are addressed.

Excellent: Monitoring damage, vulnerabilities, and awareness leads to the improved deployment of countermeasures that are evaluated by return on investment (ROI). Total program costs, including damages, are minimized. Vulnerabilities are addressed. Monitoring data are used to inform line management, to adjust protection and individual awareness, and to improve the risk-assessment model.

Outstanding: Monitoring damage, vulnerabilities, and awareness of responsibility leads to the improved deployment of countermeasures that are evaluated by return on investment (ROI). Total program costs, including damages, are minimized, as preventive measures are adapted to the ever-changing threat environment. Vulnerabilities are addressed. Monitoring data are used to inform line management, to adjust protection and awareness of individual responsibility, and to improve the risk-assessment model. Line management and individual staff are aware of vulnerabilities and accept residual risk. LBNL monitoring and risk-assessment practices demonstrate progress toward a "validated systems" approach to performance.

Performance Measure Result

CPP meets the standard for an Outstanding performance rating. CPP monitors damage, vulnerabilities, and awareness of responsibility, all of which lead to the improved deployment of countermeasures that are evaluated by ROI. Total program costs, including damages, have been minimized, and preventive measures have been adapted to the ever-changing threat environment. Vulnerabilities have been addressed. Monitoring data have been used to inform line management, to adjust protection and awareness of individual responsibility, and to improve the risk-assessment model. Line management and individual staff are aware of vulnerabilities and accept residual risk. Laboratory monitoring and risk-assessment practices demonstrate progress toward a "validated systems" approach to performance.

Successes/ Shortfalls

- CPP monitors damage. Incidents are reviewed and evaluated weekly, identifying damages and calculating costs. CPP develops quantifiable assessment data based on a methodology that relies on actual and projected costs of protection. For example, the nominal and probable damage expected from each type of cyber-security incident is described in the periodic CPP Self-Assessments. (See Berkeley Lab Cyber Protection Program Self-Assessment, September 24, 2002, Appendix B, Tables B1–B3.) Actual incident costs are accumulated weekly and throughout the year so that realistic costs can be attributed to the incidents and to the risk-management process.
- CPP monitors vulnerabilities by looking at network activity continuously through BRO, which has been in operation 24/7 since 1996 and sees each packet traversing the network boundary. CPP also scans the Laboratory's networks for vulnerabilities monthly, or more frequently as needed, for vulnerabilities associated with emerging exploits. Protective measures such as port blocking are implemented, as determined by scanning results and warnings from BRO.
- CPP, through CPIC, informs line management of vulnerabilities and associated protection issues. Cyber-security bulletins and alerts are distributed. Awareness is promoted through *Today at Berkeley Lab*, *In the Loop*, Level One Policy and Procedures distribution, New Employee Orientation, and computer-training classes. In FY 2003, additional awareness was provided by the ISSM Self-Assessment Survey, which was completed by more than 3,800 Berkeley Lab staff. ISSM results were briefed to senior management, and the final report is in draft. In addition, CPP expanded its technical training program. As of July 30, 2003, 211 staff received technical training (as opposed to 184 in FY 2002), including 19 from Lawrence Livermore National Laboratory, Stanford Linear Accelerator Center, or the Department

of Energy/Oakland Operations Office.

- Total program costs, including damages, are minimized, and preventive measures are adapted to the ever-changing threat environment. CPP deploys effective countermeasures based on cost and risk using the Laboratory's risk-assessment model. Each cyber-protection countermeasure is evaluated and rated for its effectiveness based on cost and risk, and is measured by ROI. Other quantifiable data include the effectiveness of each countermeasure, the numbers of blocked and unblocked incident types, the estimated effectiveness of each Laboratory countermeasure, damage incurred and damage avoided, and ROI for each countermeasure and for the program as a whole. (See Berkeley Lab Cyber Protection Program Self-Assessment, September 24, 2002, Appendices C and D.)

- Vulnerabilities are addressed. Host-level vulnerabilities are patched by users or system administrators with the assistance of CPP, or the hosts are blocked from Internet access until remediation is complete. Remediation of vulnerabilities is also accomplished through network-level activities such as port blocking. Monitoring data, including scan data, are used to inform line management, to adjust protection and awareness of individual responsibility, and to improve the risk-assessment model. Network vulnerability scans are conducted quarterly; targeted scans for specific vulnerabilities are done monthly; and ad hoc scans are completed as necessary. Results are posted on the Computer Protection Program home page at http://www.lbl.gov/ITSD/Security/Scans/. Password cracking is done routinely, and the results are passed on to division computer-protection liaisons for action. ISSM Self-Assessment, which improved awareness of vulnerabilities and residual risk, provided information on protection and vulnerabilities to line management and individual staff.

- Berkeley Lab monitoring and risk-assessment practices demonstrate progress toward a "validated systems" approach to performance. Validated systems assure that systems are operating correctly and that they have appropriate security measures in place. By closely monitoring systems in real time, CPP can ensure that only validated systems are operating.

  During the rating period, Berkeley Lab deployed a pilot system called NETS to gather systems information from a variety of sources within the Laboratory. NETS is based on the premise that collecting network information from multiple existing network sources, analyzing this information in near real time, and adapting the network defense automatically to guard against attack are the best

approaches to validated systems. In this way, the network can adapt to new, unknown threats, yet continue productive interactions with an open Internet environment. It is the Laboratory's vision that the network solely collects information about traffic, data, connections, and other parameters. Based on this information, suitable changes to the network architecture have been made to protect connected hosts. This protection does not depend on the state or software of the hosts, meaning that even if a rogue computer is attached to the network without permission or appropriate security checks, the network will automatically isolate it and keep it from becoming a vulnerability to the system as a whole. As NETS matures, it will show an increasing percentage of validated Laboratory systems.

- In addition, CPP participated in the development and monitoring of the ISSM Survey during the rating period.

- CPP also uncovered a major vulnerability heretofore unknown to DOE sites, which resulted in action throughout the DOE complex and an investigation led by the DOE IG Cyber Crimes Unit.

Supporting Data

- Berkeley Lab Cyber Security Self-Assessment, September 24, 2002
- ISSM Self-Assessment
- Weekly incident reports
- Scanning Results Web site http://www.lbl.gov/ITSD/Security/Scans/

Procurement

Performance Characterization

Berkeley Lab's Fiscal Year (FY) 2003 Self-Assessment result indicates that Procurement successfully supported the Laboratory mission, complied with statutes and regulations, met or exceeded the majority of DOE procurement oversight and system approval expectations, maintained a high level of customer focus and cost-effectiveness, and adhered to currently accepted best business and institutional practices.

For FY 2003, Procurement was measured by the Procurement Performance and Assessment Model (PROAM), a tool developed jointly by the Laboratory, the University of California (UC), and the U.S. Department of Energy (DOE) as the framework for systematically assessing, measuring, and reporting the state of the Laboratory's procurement system.

Procurement met or exceeded the majority of PROAM standards and expectations for system evaluation, cycle-time, rapid and alternate procurement approaches/techniques, supplier performance, customer and employee satisfaction, information availability, and cost-to-spend. Preliminary results for PROAM Sub-gauge 1.4, Meeting Socioeconomic Commitments (not weighted), indicate that two goals were not met as of the Third Quarter. Results for PROAM Sub-gauges 1.2, 1.3, 2.1, 3.1, and 4.2 are also preliminary through the Third Quarter. These will be updated with year-end supplemental data when available. Results for PROAM Sub-gauges 1.1 and 4.1 are finalized for the fiscal year.

Procurement also responded to a DOE Chief Financial Officer/Headquarters review of Berkeley Lab's procurement card activities. The review raised issues, including missing and inadequate documentation, and inadequate review of cardholders' statements and supporting documentation by monthly approvers. In response, Procurement completely overhauled the Berkeley Lab purchase card program, so that the procurement card system addresses all the issues raised by the DOE reviews.

Performance Objective #1	**Procurement Excellence***: The Laboratory maintains a procurement system that ensures Procurement programs incorporate best practices as applicable, promote customer service, and operate in accordance with policies and procedures approved by DOE and the requirements of the Prime Contract***. (Weight = 100%)**
Summary	Berkeley Lab's FY-2003 Procurement Self-Assessment comprises the evaluation of a single Performance Objective encompassing various operational elements relative to procurement system health, efficiency, compliance, customer service, and use of best business practices. The Self-Assessment also serves as the reporting mechanism for the DOE Procurement Balanced Scorecard (BSC), a model for procurement performance benchmarking, measurement, and assessment. Procurement is measured by PROAM, the framework "Gauge Model" adopted by Procurement to serve as a single, comprehensive Appendix F and Balanced Scorecard assurance and assessment tool. The model is consistent with the fiduciary responsibilities outlined in the UC Prime Contract, DE-AC03-76SF00098, and incorporates the underlying objectives and/or values of the DOE Balanced Scorecard Performance Measurement and Management Program. The Berkeley Lab Procurement system is an "approved procurement system" under cognizance of the DOE Oakland Operations Office (OAK) Head of Contracting Activity (HCA).

Objective #1 Criterion 1.1

Assessing Degree of Excellence Achieved: *The Laboratory documents and reports its performance results against established submeasures contained in the Procurement Assessment Model (PROAM).* **(Weight = 100%)**

Objective #1 Criterion 1.1 Performance Measure 1.1.a

Measuring System and Service Levels: *An overall Procurement excellence score is determined as a result of the points achieved on the PROAM. The PROAM is the management system framework that establishes and maintains a customer focus, a continuous and breakthrough process-improvement culture, and an emphasis on results.* **(Weight = 100%)**

Gradient:

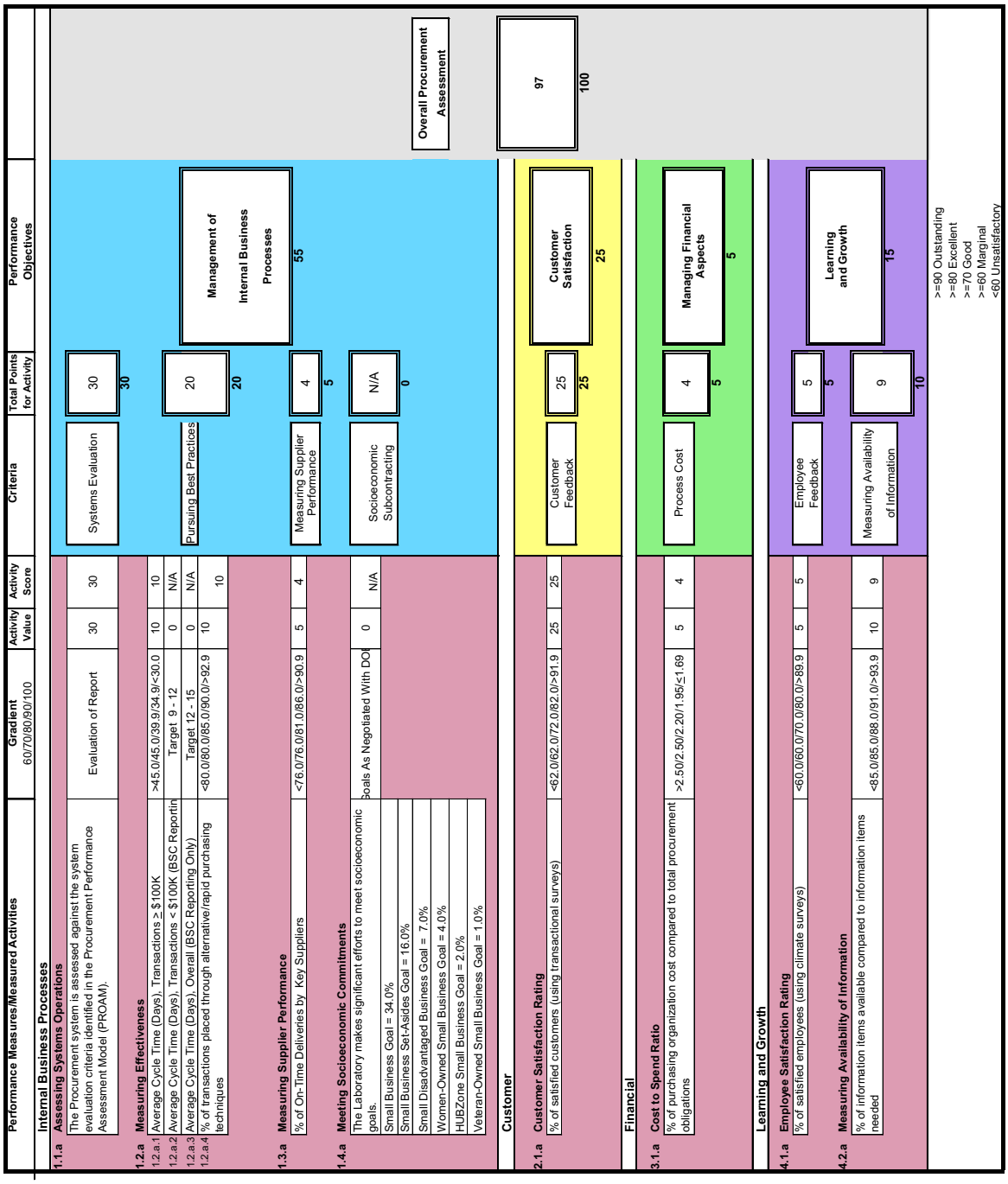
Points	Rating
≥ 90 points	Outstanding
80 – 89 points	Excellent
70 – 79 points	Good
60 – 69 points	Marginal
< 60 points	Unsatisfactory

Performance Measure Result

Procurement's performance on PROAM sub-gauges as indicated below under Successes/Shortfalls is illustrated under the FY-2003 Procurement System Assessment Approval spreadsheet (see next page).

Successes/ Shortfalls

Lawrence Berkeley National Laboratory
FY 2003 Procurement System Approval Assessment



Performance Measures/Measured Activities	Gradient 60/70/80/90/100	Activity Value	Activity Score	Criteria	Total Points for Activity	Performance Objectives
Internal Business Processes						
1.1.a **Assessing Systems Operations**						
The Procurement system is assessed against the system evaluation criteria identified in the Procurement Performance Assessment Model (PROAM).	Evaluation of Report	30	30	Systems Evaluation	30	
					30	
1.2.a **Measuring Effectiveness**						
1.2.a.1 Average Cycle Time (Days), Transactions ≥ $100K	>45.0/45.0/39.9/34.9/<30.0	10	10			
1.2.a.2 Average Cycle Time (Days), Transactions < $100K (BSC Reportin	Target 9 - 12	0	N/A	Pursuing Best Practices	20	
1.2.a.3 Average Cycle Time (Days), Overall (BSC Reporting Only)	Target 12 - 15	0	N/A			
1.2.a.4 % of transactions placed through alternative/rapid purchasing techniques	<80.0/80.0/85.0/90.0/>92.9	10	10		20	Management of Internal Business Processes
1.3.a **Measuring Supplier Performance**						
% of On-Time Deliveries by Key Suppliers	<76.0/76.0/81.0/86.0/>90.9	5	4	Measuring Supplier Performance	4	
					5	
1.4.a **Meeting Socioeconomic Commitments**						
The Laboratory makes significant efforts to meet socioeconomic goals.	oals As Negotiated With DO	0	N/A	Socioeconomic Subcontracting	N/A	
Small Business Goal = 34.0%					0	
Small Business Set-Asides Goal = 16.0%						
Small Disadvantaged Business Goal = 7.0%						
Women-Owned Small Business Goal = 4.0%						
HUBZone Small Business Goal = 2.0%						
Veteran-Owned Small Business Goal = 1.0%						
						55
						Overall Procurement Assessment
Customer						
2.1.a **Customer Satisfaction Rating**						
% of satisfied customers (using transactional surveys)	<62.0/62.0/72.0/82.0/>91.9	25	25	Customer Feedback	25	
					25	Customer Satisfaction
						25
						97
						100
Financial						
3.1.a **Cost to Spend Ratio**						
% of purchasing organization cost compared to total procurement obligations	>2.50/2.50/2.20/1.95/≤1.69	5	4	Process Cost	4	
					5	Managing Financial Aspects
						5
Learning and Growth						
4.1.a **Employee Satisfaction Rating**						
% of satisfied employees (using climate surveys)	<60.0/60.0/70.0/80.0/>89.9	5	5	Employee Feedback	5	
					5	Learning and Growth
4.2.a **Measuring Availability of Information**						
% of information items available compared to information items needed	<85.0/85.0/88.0/91.0/>93.9	10	9	Measuring Availability of Information	9	
					10	
						15

PROAM Measured Activities

Sub-Measure 1 **Management of Internal Business Processes (Activity Value: 55 Points):** *The Laboratory shall have systems in place to ensure Procurement programs operate in accordance with policies and procedures approved by DOE and the requirements contained in Prime Contract Clause 8.1, Contractor Purchasing System.*

Sub-Measure 1.1 **Systems Evaluation (Activity Value: 30 Points)** *The Laboratory conducts, documents, and reports annually, the results of a successful assessment of its purchasing system against evaluation criteria.*

Sub-Measure 1.1a **Assessing Systems Operations (Activity Value: 30 Points):** *The procurement system shall be assessed against the system evaluation criteria described in the PROAM. A series of comprehensive system and/or transactional assessments will be performed each focusing on a specific area. Assessments will take into consideration the level of risk associated with each sub-process, cost benefit analyses, opportunities for process improvement and resolution of system deficiencies. Where applicable, historical data will be used to supplement results obtained for purposes of trend analysis.*

Gradient:

Unsatisfactory	There is not an approach to the primary purpose of the system evaluation and there are major gaps in deployment of the assessment process. Cost benefit analyses and risk assessments are not accomplished and opportunities for improvement are not addressed. Leadership involvement is not evident.
Marginal	There is a basic approach to the primary purpose of the system evaluation. Cost benefit analyses and risk assessments are applied to some deficiencies and opportunities for improvement are generally addressed. Remedial actions are pursued and leadership involvement is evident in some cases.
Good	There is a sound, systematic approach, responsive to the primary purpose of the system evaluation. Cost benefit analyses and risk assessments are good when addressing deficiencies and/or opportunities for improvement. Remedial actions are appropriate and demonstrate responsible leadership in many to most cases.
Excellent	The requirements for a "Good" rating are met. In addition, the approach is responsive to the overall purpose of the system evaluation and cost benefit analyses and risk assessments are good to excellent when addressing deficiencies and/or opportunities for improvement. Remedial actions are sound and demonstrate responsible leadership in most cases.
Outstanding	The requirements for an "Excellent" rating are met. In addition, the approach is fully responsive to all the requirements of the system evaluation and cost benefit analyses and risk assessments are excellent when addressing deficiencies and/or opportunities for improvement. Remedial actions are sound and demonstrate strong leadership in most cases.

Performance Measure Results

Third Quarter Results

Procurement self-assessments were performed in accordance with the Balanced Scorecard (BSC) framework for internal process assessment, risk-based results management, and conform to DOE Contractor Review guidelines in scope, approach, and schedule (36-month review cycle). The Laboratory's FY-2003 System Evaluation Schedule is shown in Table 1 below. To date, Berkeley Lab has completed and/or successfully managed all scheduled internal and external evaluations, including Consultant and Personal Services Agreements (November 2002); Procurement Card Purchases (performed by DOE Headquarters [HQ] in January 2003 as a follow-up to the DOE Oakland Operations Office's [OAK] April 2002 review); and Fabrication Subcontracts (March 2003).

Table 1. FY-2003 System Evaluation Schedule

Type of System Evaluation	System Evaluation Standard/Element	Scheduled Date	Completion Date
Consultant/Personal Services Agreements	• Procurement Policy and Standard Practices • All transactional elements	Nov 30, 2002	Nov 21, 2002
Procurement Card Purchases	• Procurement Card Guide • Procurement Policy & Standard Practices	Jan 31, 2003	See text below
Fabrications	• Procurement Policy and Standard Practices • All transactional elements	Mar 29, 2003	Mar 25, 2003

Consultant and Personal Services Agreements

The Consultant and Personal Services Agreement (PSA) system evaluation conducted November 21, 2002, uncovered no major findings but noted several instances of missing Division Head approvals. Even though no evidence of fraud no unallowables was found, failure to obtain Division Head approval constituted a deviation of Berkeley Lab policy (SP 37.1) prior to implementation of the Procurement/Receiving/Payables (PRP) system in August 2002. This finding was not deemed likely to reoccur, however, since Division Head approval can now be eliminated due to PRP's built-in safeguard mechanism: electronic requisition approvals cover

all attachments (i.e., Consultant/PSA Request, sole source justification, etc.). In light of this development, the Appraisal Team recommended the following corrective action:

PSA-1-03: Revise SP 37.1 to eliminate the requirement for Division Head approval.

The Manager of Procurement Policy ("manager") acknowledged and concurred with the review's findings and, based on the risk-based corrective action assessment (summarized below), considered implementation of the recommendations cost effective and commensurate with the associated risk involved. The measure, summarized in Table 2 (appearing at the end of the section), were implemented expeditiously under his direct supervision.

Not Obtaining Division Head Approval

Observed Risk: Consultant/PSA Requests lacking Division Head approval is a violation of Laboratory policy and potentially exposed the Laboratory to unauthorized procurements, cost liability, fraud, and abuse.

Corrective Action/Improvement Opportunity: Revise SP 37.1, *Consultants and Personal Services*, to eliminate the requirement for Division Head approval., as the existing PRP Signature Authorization System (SAS) electronic approval process has been implemented in lieu of division head approval.

Cost/Benefit Analysis: The cost for taking the above action was minimal. The benefit is a streamlined process with no compromise in accountability and control (built into PRP).

Additional Opportunities for Improvement: None were noted. Since an electronic safeguard is built into PRP, no validation was deemed necessary.

Priority: High priority; implementation of change to SP 37.1, *Consultants and Personal Services,* took place within 90 days.

Procurement Card (PCard)

Because scheduling of the PCard self-assessment coincided with the Laboratory's ongoing implementation of corrective actions from the April 2002 OAK audit as well as the January 2003 DOE HQ follow-up review, a management decision was made, with OAK approval, to manage these activities in lieu of an internal assessment. The following summarizes OAK's audit findings (reference: *Report of OAK's April 2002 Department Purchase Card Program Pilot Review*) and Laboratory risk assessments and corrective actions (reference: *Berkeley Lab's Corrective Action Plan in response to the OAK Pilot Review*), leading up to the HQ follow-up review:

DOE-OAK Review (April 2002)

The OAK review of the LBNL Procurement Card Program uncovered a number of instances where internal controls and procedures needed strengthening. Control issues included instances of inadequate approving official review of cardholder statements, missing documentation to support purchases, purchase of restricted items, non-Laboratory employees with purchase cards, cardholders not obtaining required prior authorization, and cardholders splitting transactions. A total of six (6) recommendations were made as a result of these findings. These are shown below under Items 1 thru 6. In addition, Items 7 thru 9 were developed independently by the Laboratory to further improve its Procurement Card program.

1. Consider implementing a training program for Monthly Approvers. Emphasize the importance of the Monthly Approver as a key control element. Establish better criteria for sampling transactions, documenting monthly review and providing input/feedback to the cardholder and the Procurement Administrator.

2. Implement periodic refresher training for cardholders. Emphasize best practices of cardholders with fully developed systems for maintenance of support documentation for purchases.

3. Revise policy and procedures to address controllable property identification for personal property greater than $5,000 for those cardholders with higher credit limits.

4. Pursue recovery of sales taxes paid. Emphasize the importance of the sales tax exemption in training. Establish mechanism for Accounts Payable to provide evidence of sale tax recovery to the cardholder for their files.

5. Evaluate and take appropriate action to comply with existing policy on the issuance of cards to employees only or reassess the policy.

6. Evaluate and take appropriate action to comply with existing policy on the use of cards by the named cardholder only.

7. Devise a Cardholder Violations/Consequences policy to formally define the consequences faced by a cardholder for the listed program violations.

8. Establish an automated, electronic method for determining the termination in employment of Laboratory employees and guests who are cardholders will be established. This will support current procedures to ensure procurement cards are canceled at the termination of an authorized cardholder's employment.

9. Establish a custom Merchant Category Code (MCC) Group with the procurement card bank in order to block additional merchant categories/purchases from the card, specifically certain types of retail merchant categories. The new custom group will be used on the majority of procurement cards. The new custom group will also provide additional protection should a Laboratory procurement card account ever become compromised.

Risk Assessment

The Manager acknowledged and fully concurred with the review's findings, and considered the recommendations cost-effective and commensurate with the associated risk. He also concluded that a full-fledged risk-based corrective-action assessment was not necessary since the recommended changes were all deemed significant control issues that needed to be rectified. The corrective measures, summarized in the *Berkeley Lab's Corrective Action Plan in response to the OAK Pilot Review* (released earlier) and in Table 3 (appearing at the end of this section), were scheduled and implemented expeditiously under his direct supervision (last milestone completed April 21, 2003).

DOE-HQ Review (January 2003)

The key objectives of the DOE HQ review of Berkeley Lab's procurement card program was to assess program controls and evaluate the effectiveness of corrective actions implemented since the April 2002 review. Many positive program aspects were noted along with a number of challenges. The review [reference *Report of January 2003 Headquarters Review of Selected Financial Management Topics at LBNL,* including *Findings and Recommendations*] concluded that the LBNL procurement card program needed significant changes in order to provide reasonable assurance that controls are adequate to identify and deter potential fraud and abuse. A total of nine (9) recommendations for implementation by the DOE Contracting Officer/Laboratory were made as a result of these findings. (The Laboratory's subsequent response to each recommendation is also shown for information purposes.)

1. Recommendation: The Contracting Officer (CO) should direct Lawrence Berkeley National Laboratory (LBNL) to obtain documentation to support all identified instances of missing documentation from this review or to take other actions to verify that the cardholder transactions in question represented valid charges to the Government (e.g., physically inspect items claimed to have been purchased). Appropriate management actions should also be taken to address on-going cardholder performance problems.

   Response: In February 2003 the Laboratory Director, as a result of recent audits and reviews, asked all LBNL divisions to conduct a

three year retro review of all PCard transactions (approximately 100,000 transactions). The review is scheduled to be conducted in three phases: (1) Assessment (Feb-Mar), (2) Correction (Mar-Apr), and Archiving (May).

We have already revoked the card buying privileges of individuals who had significant documentation errors. In addition, we have revoked the buying privilege of about 50 other cardholders who had not taken the refresher training (or their monthly approver did not take their training). We have reduced the number of cardholders to approximately 80, from 295 in April 2002. We are redesigning the program for a cardholder population of 30–35. The task force report, *Lawrence Berkeley National Laboratory Task Force: Report on Low Value Procurements*, dated April 2003, presents the recommendation to implement such a program.

2. Recommendation: The CO should direct LBNL to require cardholders to maintain adequate documentation to support purchases, including: invoices, receipts, packing slips, evidence of independent receipt, and other relevant documentation as available. Further, monthly approvers should ensure that the documentation provided by the cardholder is adequate to support the purchase, or request additional information before approving the transaction. Approving officials should be trained to ensure that the information provided on cardholder documentation is sufficient to relate the documentation to the specific purchase (e.g., includes dollar values, purchase order numbers, etc.). LBNL guidelines should be revised to reflect the specific requirements.

   Response: We are reviewing the documentation requirements. Although cardholders have little control over the level of detail that vendors supply on their packing slips, we will explicitly put in our policy and training instructions to get as much documentation as available, including screen shots on items ordered on the internet, to ensure an auditor can associate a specific item to the file documentation. Our redesigned PCard program will have central receiving functions to address this area of concern. The training has been conducted. For those cardholders or approvers who have not attended the required training, the cardholder's buying privileges have been revoked (approximately 50 cardholders).

3. Recommendation: The CO should direct LBNL to require that monthly approvers review documentation to support every cardholder transaction on their monthly statements. Appropriate management actions should also be taken to ensure that monthly approvers are held accountable for complying with requirements.

   Response: LBNL has reduced the number of monthly approvers, and

current approvers are business managers or a line designee of the Division Director who have been provided formal required training. In the redesigned PCard program, monthly approvers will be Procurement supervisors who will be held accountable by Procurement Management for complying with program requirements. These Procurement supervisors will receive training that emphasizes the responsibility of approvers.

4. Recommendation: The CO should direct LBNL to discontinue the practice of allowing cardholders to provide prior authorization for (have signature authority for) their own transactions. Prior authorization should be independent of the cardholder.

   Response: In LBNL's redesigned PCard program, there will be a formal requisitioning process, with cardholder being independent from the requestor.

5. Recommendation: The CO should direct LBNL to require independent monthly approval of all cardholder statements and transactions including those of procurement buyers.

   Response: The procurement buyers accounted for less than 0.5% of all transactions and less than 1% of all PCard dollars spent. Their purchases were from vendors that would not take a purchase order. These individuals have purchasing authority (without review) from $100,000 to $5M. In addition, there was a separate requisition process in that the LBNL scientific division requested these purchases. However, Berkeley Lab has already revoked these cards from the Procurement Department buyers. In the redesigned program, the Procurement supervisors will be responsible for the monthly approval of cardholders' statements and transactions. They will ensure proof of receipt is documented for all transactions.

6. Recommendation: The CO should direct LBNL to cancel or deactivate cards for UC cardholders that are not currently employed by LBNL.

   Response: We have cancelled non-LBNL employee cards as a result of this recommendation. In the redesigned program, only fulltime LBNL Procurement employees will have PCards. There will be no PCards in the hands of non-LBNL employees.

7. Recommendation: The CO should direct LBNL to revise its property management tagging policy and procedures to require that all property meeting the PMR sensitive item definition be tagged with a unique identifying number and tracked in property records. LBNL should further ensure that non-sensitive items are appropriately tagged as Government property.

Response: We are currently working with UCOP, UCLA, and DOE to determine the exact items that require tagging, along with a Tri-Lab standard procurement practice on PCard policies and procedures. LBNL's redesigned PCard program will meet the requirements of the new UC corporate standard. LBNL is currently redesigning its purchase card program and expects to have the program fully implemented by December 31, 2003.

8. Recommendation: The CO should direct LBNL to take appropriate actions to validate that the cardholder transactions questioned in the April 2002 review represented valid charges to the Government. In addition, appropriate management actions should be taken to address those cardholders who failed to follow established guidelines. The results of these activities should be well documented to support future review.

   Response: Berkeley Lab is aggressively correcting all documentation deficiencies from the last three years' PCard purchases, which includes the April 2002 review. This review will be completed by April 30, 2003.

9. Recommendations: The CO should direct LBNL to:

   a. Establish and enforce specific policies and procedures on consequences for cardholders and approving officials who fail to comply with program requirements.

   Response: LBNL has developed and issued the PCard consequences/violation policies and updated its commitment letters and the PCard Guide and Policy Manual. Under the new PCard program, approvers will be distributed purchasing supervisors, subject to standard procurement practices and performance reviews.

   b. Require cardholders and monthly approvers to sign up-front agreements regarding their responsibilities and related consequences for inappropriate use of purchase cards.

   Response: Berkeley Lab has reissued its commitment letters and has always required signed, upfront agreements.

   c. Notify monthly approvers and cardholders of problems/issues including:
   Questions arising from "red flag" reviews, instances of missing documentation, instances where cardholders fail to reconcile transactions in a timely manner, and other relevant issues.

Response: Under the new PCard program, this will be part of the standard and continuous training of PCard holders in the Procurement Department.

d. Establish a set timeframe for periodic refresher training for cardholders and monthly approvers (e.g., every 2 years).

Response: All current PCard holders have been trained. Under the new program, the Procurement employees will undergo extensive training on PCard polices and use of the various software systems. Periodic refresher training will be offered.

e. Expressly prohibit cardholders from approving their own statements in local policies.

Response: LBNL will revise its PCard guidelines/policy to expressly prohibit cardholders from approving their own statements. All new cardholders and approvers will be trained to this guidance.

f. Ensure all cardholders and monthly approvers receive up-to-date training as soon as possible, and consider suspending purchasing privileges when training requirements have not been met.

Response: As of January 31, 2003, 178 cardholders have taken refresher training in Laboratory PCard policies and procedures. Monthly approvers also received approver training. PCard holders who either did not take the refresher training and/or their approvers failed to complete approver training had their PCard privileges revoked.

g. Formally document LBNL compliance with specific requirements of Acquisition Letter 2002-07, "Contractor Purchasing System Reviews - Purchase Card Considerations."

Response: We believe our new PCard program is in full compliance with AL 2002-07 and will submit the program for DOE/BSO review to ensure this compliance. Attached (previously) is a copy of the report, which contains recommendations for a redesigned PCard program at Berkeley Lab. This program is fully compliant with the Acquisition letter.

h. Notify cardholders, monthly approvers, and requestors when costs are charged to default projects due to failure of cardholders to reconcile transactions in a timely manner. Require resolution and re-charging as appropriate.

Response: In the new PCard program, a requisition is required with a valid project ID. Therefore, no default project ID will be charged.

Risk Assessment

The Manager acknowledged and fully concurred with the DOE-HQ review's findings, and considered the recommendations valid and necessary. He also concluded that, as per the OAK review finding, a full-fledged risk-based corrective action assessment was not necessary by virtue of the fact that all of the recommendations addressed control issues that needed rectification. The Laboratory's response to DOE-HQ findings and recommendations fully addressed all issues raised by DOE-HQ. Additionally, a Low Value Procurement Task Force, consisting of senior Laboratory representatives, was established by the Laboratory Director to specifically address the stated concerns and to develop a new Low Value Procurement Program that eradicates these systemic vulnerabilities. (See the *LBNL Task Force Report on Low Value Procurements,* dated May 14, 2003.) In establishing the new program, the task force focused on the key elements of significantly enhanced accountability from fewer cardholders, more effective controls, and line management accountability. The *Task Force Report on Low Value Procurements* was issued in May 2003. The Low Value Procurement Program is currently being implemented and is expected to be in place by October 2003.

Referenced Correspondence and Documents

Official correspondence issued up to this point includes the following: (1) *Report of January 2003 Headquarters Review of Selected Financial Management Topics at LBNL, including a) Findings and Recommendations, and b) Report of OAK's April 2002 Department Purchase Card Program Pilot Review;* (2) *Berkeley Lab's Corrective Action Plan in response to the OAK Pilot Review;* (3) *The Laboratory's Response to Findings and Recommendations As Noted in the Headquarters Review of Selected Financial Management Topics at Lawrence Berkeley National Laboratory;* and (4) *The LBNL Task Force Report on Low Value Procurements.* These documents (not attached) have all been previously issued and are retained in Procurement files.

Fabrication Subcontracts

The Fabrication Subcontracts review examined, on a transactional basis, Procurement's compliance with federal laws, regulations, Contract 98, and approved Laboratory procedures for mechanical and electronic fabrications. The March 25, 2003, evaluation determined that goods and services procured under fabrication orders support the Laboratory mission in a cost-effective and compliant manner, and support Laboratory policy and business principles governing such actions, with no systemic findings apparent. As a result, no corrective actions were recommended, and no risk assessment was performed. Fabrications will be re-evaluated in approximately 36 months from the FY-2003 assessment date.

Summary

The Laboratory's risk-based assessment resulted in one corrective milestone selected for implementation from the two internal system evaluations and nine corrective actions from the April 2002 OAK review. They are shown in Tables 2 and 3, respectively. These tables also illustrate the Laboratory's current progress on corrective-action implementation on these assessments.

Table 2. FY-2003 Internal System Evaluation Corrective-Action Schedule

Action	Responsible Person	Scheduled Completion Date	Actual Completion Date
PSA-1-03: Revise SP 37.1 to eliminate the requirement for Division Head approval.	Chen	Feb 28, 2003	Feb 27, 2003

Table 3. FY-2003 DOE-OAK PCard System Review Corrective-Action Schedule

Action	Responsible Person	Scheduled Completion Date	Actual Completion Date
#1. Training Monthly Approvers			
Develop a training class for monthly approvers with the goal of strengthening the monthly approvers' oversight of cardholders and increasing their understanding of the PCard program. Stress the importance of the monthly approver's role in the PCard program. Check other UC campuses, DOE, and Labs to obtain information/documentation regarding their approver training methods. Train approvers to verify the cardholder is retaining the necessary paperwork. Alter/revise based on feedback from first training session.	Fernandes	October 23, 2002	October 28, 2002; November 4, 2002
Conduct training: Hold primary class. Hold make-up class.	Fernandes	October 29, 2002; November 5, 2002	October 29, 2002; November 5, 2002
Hold additional monthly approver make-up sessions.	Fernandes	January 8, 2003; January 15, 2003	January 8, 2003; January 15, 2003; March 13 and 19, 2003
#2. Cardholder Refresher Training			
Develop cardholder refresher training classes. In particular, emphasize program requirements in which the DOE review showed weaknesses: signature authorization, retention of packing slips, recovery of sales tax and split orders. Alter/revise based on feedback from first training sessions.	Fernandes	October 23, 2002	October 25, 2002; October 26-November 13, 2002
Conduct refresher training – Phase 1 cardholders. Hold training class. Hold make-up class. Hold additional Phase 1 make-up sessions.	Fernandes	November 6, 2002; November 14, 2002; January 8, 2003; January 14, 2003	November 6, 2002; November 14, 2002; January 8, 2003; January 14, 2003

Table 3. FY-2003 DOE-OAK PCard System Review Corrective-Action Schedule (continued)

Action	Responsible Person	Scheduled Completion Date	Actual Completion Date
Conduct refresher training – Phase 2 cardholders. Hold training class. Hold make-up class. Hold additional Phase 2 make-up session.	Fernandes	October 25 and 31, 2002; November 4, 2002; January 9, 2003	October 31, 2002; November 4, 2002; January 9, 2003
#3. Controllable Property			
Include controllable property on the cardholder/low value field buyer Restricted Items list.	Fernandes		June 27, 2002
Notify cardholders with Procurement Card authority above $5k regarding the updated controllable property restriction on the card and low value buying.	Fernandes		June 27, 2002
Update the "Commitment Authority – Procurement Card Purchases" letter given to cardholders who have signature authority above $5k to include the controllable property restriction.	Fernandes		April 23, 2002
Validate action by reviewing order records of cardholders with procurement card authority above $5k. Perform a follow-up review.	Fernandes/ Davis	September 30, 2002; January 31, 2003	September 30, 2002
#4. Recovery of Sales Taxes Paid			
Determine outstanding sales tax paid and give the information to A/P for recovery.	Fernandes/ Davis	July 20, 2002	July 17, 2002
Validate action by verifying that sales tax credit has been processed and applied to the July GL.	Fernandes/ Davis	August 9, 2002	August 2, 2002
#5. Issuance of Cards to non-Lab Employees			
Update Procurement Card documentation (Cardholder Procurement Card Guide) to include policy regarding non-issuance of Procurement Cards to non-Laboratory employees.	Fernandes		June 4, 2002
Validate action.	Fernandes		June 4, 2002

Table 3. FY-2003 DOE-OAK PCard System Review Corrective-Action Schedule (continued)

Action	Responsible Person	Scheduled Completion Date	Actual Completion Date
#6. Use of Cards Only by the Named Cardholder			
Cardholder has been notified to stop the practice of allowing another employee to charge against the card.	Fernandes		April 16, 2002
Cardholder notified of suspension from using the Procurement Card for two months, effective October 1, 2002.	Fernandes	August 15, 2002	August 15, 2002
Validate action. Audit cardholder's Procurement Card activity after cardholder resumes Procurement Card buying.	Fernandes	January 31, 2003	January 31, 2003 and February 26, 2003
#7. Cardholder Violations/Consequences Policy			
Finalize draft cardholder violations to the Procurement Card program and consequences policy.	Fernandes	October 8, 2002	October 14 and 22, November 11, 2002
Meet and discuss with HR regarding proposed policy.	Arri/Weiner	December 20, 2002	December 20, 2002
Obtain LBNL Management approval of policy.	Arri/Weiner/ Scott	February 28, 2003	January 16, 2003
Communicate Violations/Consequences policy to cardholders, monthly approvers and division contacts.	Fernandes	March 15, 2003	April 17, 2003
#8. Cardholder Termination – Automated Notification of Lab Employment Termination			
Meet with ISS and Travel to understand how ISS designed employee termination notification system for Travel works. Determine how Travel's notification system can be modified for use by PCard Administration.	Ball/Fernandes	October 30, 2002; November 12, 2002	October 30, 2002; November 12, 2002
Submit desired notification design to ISS.	Ball	November 13, 2002	November 13, 2002
Create electronic employee/guest termination notification system for PCard Administration.	Arri/Ball/ Fernandes/ Guerrero	December 23, 2002	December 19, 2002

Table 3. FY-2003 DOE-OAK PCard System Review Corrective Actions Schedule (continued)

Action	Responsible Person	Scheduled Completion Date	Actual Completion Date
#9. Establishment of a Custom Merchant Category Code (MCC) Group			
Determine the merchant category codes to be blocked under the new custom MCC category code group.	Fernandes/ Davis	January 31, 2003	March 13, 2003
Contact the bank to establish a custom MCC category code group and give the bank the merchant codes to be blocked under the new MCC group.	Fernandes	February 14, 2003	January 13, 2003; March 13, 2003
The bank will establish a LBNL custom MCC group number and notify Pcard Administration.	Trusiak/Wolff	March 31, 2003	March 19, 2003
Determine card accounts/cardholders who will receive the new custom MCC group block on their cards.	Fernandes/ Davis	March 31, 2003	March 21 and 24, 2003
Process update with bank, changing the MCC group on specified card accounts to the new custom MCC group.	Fernandes/ Davis	April 11, 2003	March 24, 2003; April 3, 2003
Verify requested changes have been made to the specified card accounts by the bank.	Davis	May 9, 2003	April 21, 2003

Sub-Measure 1.2	**Pursuing Best Practices (Activity Value: 20 Points)** *The Laboratory will compare its operational effectiveness to benchmarking data and industry standards and establish goals and gradients accordingly.*
Sub-Measure 1.2.a	**Measuring Effectiveness (Activity Value: 20 Points)** *The Laboratory will be measured against benchmarks and industry standards for cycle time results for transactions (i.e., new purchase orders, task orders, and subcontracts), percent of transactions placed through rapid and alternate procurement approaches/techniques.*
Sub-Measure 1.2.a.1	**Average Cycle Time (Days) for Transactions More Than $100,000 (Activity Value: 10 Points)** *Performance will be assessed and rated based on the following gradients:* **Unsatisfactory** *> 45.0 Days* **Marginal** *40.0–45.0 Days* **Good** *35.0 – 39.9 Days* **Excellent** *30.0–34.9 Days* **Outstanding** *< 30.0 Days*
Sub-Measure 1.2.a.2	**Average Cycle Time (Days) for Transactions Equal To or Less Than $100,000 (Activity Value: 0 Points)** *Goal for BSC Reporting is: 9–12 Days*
Sub-Measure 1.2.a.3	**Average Cycle Time (Days) for all Transactions (Activity Value: 0 Points)** *Goal for BSC Reporting is: 12–15 Days*

Sub-Measure 1.2.a.4 **Percent of Transactions Placed Through Rapid and Alternative Procurement Approaches/Techniques (Activity Value: 10 Points)**

The percentage of transactions placed using rapid and alternative procurement approaches/techniques will be measured. Transactions will include purchasing cards, verbal orders, Just-In-Time (JIT) contracts, Material Release System (MRS), Electronic Data Interchange (EDI), E-Commerce, Blanket Orders, Leveraged Buys, Integrated Contractor Purchasing Team (ICPT) National Agreements, Stores, and Low Value Purchases.

The percent utilization of rapid and alternative procurement approaches/techniques will be measured using the following formula:

$$\frac{\text{Number of Transactions Using Rapid and Alternative Procurement Approaches/Techniques}}{\text{Total Number of Transactions}}$$

Performance will be assessed and rated based on the following gradients:

Unsatisfactory *< 80.0%*

Marginal *80.0 – 84.9%*

Good *85.0 – 89.9%*

Excellent *90.0 – 92.9%*

Outstanding *> 93.0%*

Performance Measure Results

Third Quarter Results

Cycle-Time

The Laboratory achieved a Third Quarter year-to-date (YTD) result of 20.7 days for transactions over $100,000, and continues to meet the criteria for Outstanding. The Laboratory's performance on Cycle-time continued to be competitive with government and industry standards, such as the Center for Advanced Purchasing Studies (CAPS) benchmarks established by the Institute of Supplier Management (ISM). It was noted that performance in this area has steadily improved over the same period the past two years (27.3 days in FY 2001, 23.2 days in FY 2003), attributed primarily to incremental efficiencies gained from new tools and equipment (PeopleSoft Purchasing Receiving Payables system [PRP]; faster computers, networks and connections, Web server access, data warehouse, etc.).

For Information Only: The Laboratory's Third Quarter YTD Cycle-time for orders $\leq$ $100,000 was 7.8 days. The Third Quarter overall YTD Cycle-time for all orders was 8.2 days.

Rapid and Alternative Procurement Approaches/Techniques

The Laboratory's Third Quarter Rapid and Alternative Procurement Transactions (RAPT), which include Distributed (i.e., Procurement Card, Low Value), B2B System Subcontract (JIT) and Blanket transactions, was 93.6% of all procurements. This meets the criteria for Outstanding. Current results reflect the following transaction basis:

Alternate Procurement Transactions to date:	54,913
Total Procurement Transactions to date:	58,674

Sub-Measure 1.3 **Supplier Performance (Activity Value - 5 Points)**
The Laboratory shall manage its suppliers in such a manner as to ensure that the goods and services provided meet the Laboratory's requirements.

Sub-Measure 1.3.a **Measuring Supplier Performance (Activity Value - 5 Points)**
The Laboratory shall measure the percentage of on-time deliveries from key suppliers.

The percentage of on-time deliveries of purchased goods from key suppliers will be tracked quarterly and performance will be measured on a cumulative basis. The following formula will be used:

$$\frac{\text{Number of On-Time Deliveries by Key Suppliers}}{\text{Total Number of Deliveries by Key Suppliers}}$$

Key suppliers are defined as commodity vendors within the past three years who were awarded a minimum average of ten orders and $50,000 per year, or those supplying critical commodities at any activity or dollar level. Analysis of supplier activity spanning three years, taking into consideration their programmatic significance, results in the selection of the following 25 key suppliers for FY 2003:

Agilent Technologies	Network Appliance*
Alcatel Vacuum Products	Newport Corporation
Apple Computer Inc.	PC Mall
Applied Biosystems	Physical Electronics Inc.
CDW*	Precision Computers*
Dell Computer Corporation	SESO
EDC Systems*	Stanford Research Systems
FEI	Stealth Network Communications*
Fine Tec Computer*	Sun Microsystems Inc.
In-Sync*	Varian Inc.
JEOL	VAT Inc.
McBride & Associates	Western Tool and Engineering*
National Instruments Corporation	

* Small business concern

Performance will be based on cumulative results through year-end. Assessment and rating will be based on the following gradients:

Unsatisfactory	< 76.0%
Marginal	76.0 – 80.9%
Good	81.0 – 85.9%
Excellent	86.0 – 90.9%
Outstanding	> 91.0%

Performance Measure Results

Third Quarter Results

Key suppliers collectively achieved an 82.3% on-time delivery through the Third Quarter, which rates as Good under the gradient.

Sub-Measure 1.4

Socioeconomic Subcontracting (Activity Value: 0 Points)
The Laboratory shall support and promote socioeconomic subcontracting programs..

Sub-Measure 1.4.a

Meeting Socioeconomic Commitments (Activity Value: 0 Points)
The Procurement organization will provide, the percentage of actual subcontract dollar obligations (not subcontract face value) in the following six categories: Small Business, Small Business Set-asides, Small Disadvantaged Business, Veteran-Owned Small Business, Women-Owned Small Business, and HUBZone awards. A description of annual activities in support of the socioeconomic program will also be provided.

Obligations qualifying in more than one category may be counted in more than one category, e.g., Small Business and Small Disadvantaged Business. Lower tier subcontracts cannot be counted toward the primary goal, but may be goaled and reported separately.

The purchasing base will include all obligations incurred during the fiscal year period, excluding: (1) Subcontracts with foreign corporations which will be performed entirely outside of the United States; (2) Utilities (gas, sewer, water, steam, electricity and regulated telecommunications services); (3) Federal Supply Schedule Orders and GSA Orders to large businesses when all terms of the GSA contract apply; (4) Agreements with DOE management and operating contractors and University campuses; (5) Federal government and DOE mandatory sources of supply; Federal prison industries, industries of the blind and handicapped; and (6) Procurement card purchases.

Goals as negotiated with DOE for FY 2003 are as follows:

Small Business	*34.0%*
Small Business Set-Asides	*16.0%*
Small Disadvantaged Business	*7.0%*
Women-Owned Small Business	*4.0%*
HUBZone Small Business	*2.0%*
Veteran-Owned Small Business	*1.0%*

Performance Measure Result

Third Quarter Results:

The Laboratory's Third Quarter results, in comparison with approved goals, are as follows:

Category	Goal (%)	Actual (%)*
Small Business	34.0	41.8
Small Business Set-Aside	16.0	17.6
Small Disadvantaged Business	7.0	4.8
Women-Owned Small Business	4.0	6.1
Hubzone Small Business	2.0	0.26
Veteran-Owned Small Business	1.0	0.03

*Cumulative through June 30, 2003 (Procurement Base = $81.4M)

The Laboratory's Third Quarter results fell below expectations in three categories: Small Disadvantaged Business (SDB), HUBZone Business (HZSB), and Veteran-Owned Small Business (VOSB). Despite the shortfall, dollar commitments were significant in these areas: $3.9M for SDB; $209k for HZSB; and $21k for VOSB. HZSB and VOSB awards represent record levels since reporting for these categories began in FY 2002. (FY 2003 represents the first year HZSB and VOSB are goaled under DOE's program.) Goals for the other categories (SB, Small Business Set-Aside [SBSA], Woman-Owned Small Business [WOSB]) were comfortably exceeded, and overall performance is not far from expectations given Procurement's ambitious goals.

The Laboratory's FY-2003 outreach included participation in the DOE Small Business Reservation program; DOE Small Business Set-Aside program; DOE 8(a) Business Development program; Advanced Acquisition Planning for major procurements; using ProNET, GSA contracts, and government and industry source directories and Web sites as vendor sourcing tools; DOE, Small Business Administration (SBA), and local industry/government-sponsored workshops; business development and technology expositions (e.g., ICSBD, NCSDC, MBDA); membership in ICSBD; attending DOE Annual Small Business Conference and advertising on its procurement Web site; maintaining an Internet Web page for vendors; hosting annual Information Technology and Laser expositions; targeting small and disadvantaged businesses in advertised architect-engineer (A-E) and construction projects, maximizing small business participation in construction and A-E stables and major acquisitions; advertising in the *Minority Business and Professional Directory*; aligning subcontracting objectives with employee performance expectations; and maintaining an open-door policy for vendor product demonstrations.

Sub-Measure 2 **Customer Satisfaction (Activity Value: 25 Points)**
The Laboratory shall assess the degree of satisfaction with Procurement's ability to meet customer needs in terms of timeliness, quality, and communications.

Sub-Measure 2.1 ***Customer Feedback*** **(Activity Value: 25 Points)**
As a continuous indicator of overall customer satisfaction, the Procurement function will survey the needs and satisfaction of its Laboratory customers relative to its purchasing systems and methods.

Sub-Measure 2.1.a **Satisfaction Rating (Activity Value: 25 Points)**
As a continuous indicator of overall customer satisfaction under the BSC, LBNL Procurement will conduct real-time oral transaction surveys of its requesters relative to its purchasing systems and methods and use the results to determine satisfaction ratings. FY 2003 surveys will be conducted as described below.

Customer Sampling

Requesters of 48 randomly selected transactions and 12 transactions reflecting critical projects selected by the Manager will be surveyed verbally from a projected universe of approximately 5,500 transactions based upon an estimated confidence level of approximately 98% and error rate of 10% as determined by the US Army Audit Statistical System. Five surveys will be conducted per month.

Survey Questionnaire

The survey questionnaire addresses core response areas in the BSC Performance Measurement and Management Program including timeliness, quality, communication, efficiency, and ethical practices.

Requester Survey respondents will be asked to provide Yes/No answers to four questions and an overall satisfaction rating (Poor, Below Average, Satisfactory, Highly Satisfactory, or Outstanding) for the transaction with comments on potential areas for improvement. For scoring purposes, the responses will be converted to a 100-point scale by assigning 20 points to each question, so that the maximum score for each questionnaire will be 100 points. A "yes" response to each of the first four questions will be worth 20 points; a "no" response will be worth zero points. The response to the fifth question will be scored as follows: Poor, 0 points; Below Average, 5 points; Satisfactory, 10 points; Highly Satisfactory, 15 points; and Outstanding, 20 points. A score of 70 points or better for a questionnaire will be interpreted to mean that the customer is satisfied. The formula below will then be applied to determine the customer satisfaction rating.

$$\text{Customer Satisfaction Rating} = \frac{\text{Number of Satisfied Requesters}}{\text{Total Number of Requesters Responding to Survey}}$$

Survey results and comments for potential areas for improvement will be compared against the previous survey results to the maximum practicable extent and presented to Procurement management for review, analysis, and required action. Results will be reported in the year-end Self-Assessment.

Schedule

Surveying Milestones	Documentation	Scheduled Completion Date	Responsible Person
Conduct Verbal Requester Survey (five per month)	Survey Questionnaire	Monthly	Chen
Compile/Analyze/Report Results	Year-End Self-Assessment	July 2003	Chen

Gradients

Unsatisfactory	*< 62.0% of customers responding to survey are satisfied.*
Marginal	*62.0% - 71.9% of customers responding to survey are satisfied.*
Good	*72.0% - 81.9% of customers responding to survey are satisfied.*
Excellent	*82.0% - 91.9% of customers responding to survey are satisfied.*
Outstanding	*≥ 92.0% of customers responding to survey are satisfied.*

Performance Measure Results

Third Quarter Results

Results of surveys conducted through the Third Quarter indicate that 96.5% (43 of 45) of surveyed customers are satisfied, which meets the criteria for Outstanding. This indicates that Berkeley Lab continues to exceed expectations for customer satisfaction relative to its purchasing system. The high customer-satisfaction rating indicates that program objectives are being met, and that customer-driven solutions have been recognized and appreciated by the Laboratory's procurement users.

The above result is attributed to the Financial Services Department's (FSDs) drive to improve customer-service levels by constantly upgrading and improving existing procurement-interfacing systems (Financial Management System [FMS], Accounts Payable [A/P], Integrated Reporting and Information System [IRIS] II—soon to be replaced by Berkeley Lab Information System [BLIS], etc.), adapting to unique customer needs, innovative problem solving, and removing communication barriers between departments. The Procurement Web site, in providing convenient access to a variety of Laboratory resources, continues as the Laboratory's one-stop Procurement resource center in providing the following: Procurement Order Wizard; access to IRIS II data warehouse; links to UC and other institutional Web sites; recycled product listings for meeting Executive

Order 13101 requirements; and shipping and equipment-repair guidelines. In addition, the PeopleSoft Purchasing Receiving Payable (PRP) system's Web-based requisitioning process and online approvals greatly facilitates acquisition requests; its real-time system interfaces with other Laboratory systems (e.g., A/P, FMS) continues to provide unfettered access to reports.

Sub-Measure 3

Managing Financial Aspects (Activity Value: 5 Points)
The Laboratory shall ensure optimum cost efficiency of purchasing operations.

Sub-Measure 3.1

Process Cost (Activity Value: 5 Points)
The Laboratory shall compare its operating costs as a percentage of total procurement dollars obligated to benchmarking data and industry standards and establish goals and gradients accordingly.

Sub-Measure 3.1.a

Cost to Spend Ratio (Activity Value: 5 Points)
Operating costs as a percentage of total procurement dollars obligated will be computed. The Laboratory's Purchasing Organization costs shall be divided by total purchasing obligations using the following formula:

$$\text{Cost to Spend Ratio} = \frac{\text{Purchasing Organization Costs}^*}{\text{Total Purchasing Obligations}}$$

**Costs associated with Total Purchasing Obligations*

Performance will be assessed and rated based on the following gradients:

Unsatisfactory	*> 2.50%*
Marginal	*2.21% – 2.50%*
Good	*1.96% – 2.20%*
Excellent	*1.70% – 1.95%*
Outstanding	*< 1.69%*

Performance Measure Results

Third Quarter Results

The Laboratory's Third Quarter YTD Procurement Cost to Spend was 2.07%, which meets the criteria for Good. The improvement over the lackluster Midyear result (2.52%) was attributed to a doubling in program spending in the Third Quarter versus the Second Quarter. The 2.07% ratio reflects YTD FY-2003 Procurement Costs and Commitments as follows:

Procurement Operating Expense:	$2,121,557*
Procurement Commitments:	$102,670,583

*Does not include new Distributed Procurement Unit (DPU) costs

Sub-Measure 4 **Learning and Growth (Activity Value: 15 Points)**
The The Laboratory shall ensure that information and feedback mechanisms are available to procurement employees to enhance continued successful procurement operations.

Sub-Measure 4.1 **Employee Feedback (Activity Value: 5 Points)**
The Laboratory shall foster improvement of processes and performance by assessing and pursuing improvements in employee satisfaction.

Sub-Measure 4.1.a **Employee Satisfaction Rating (Activity Value: 5 Points)**
As a continuous indicator of overall customer satisfaction under the BSC, LBNL Procurement will conduct written climate surveys of Procurement employees (excluding contractor employees) relative to its purchasing systems and methods and use the results to create satisfaction ratings. FY 2003 surveys will be conducted as described below.

Procurement Employees

All LBNL Procurement employees will be surveyed during May of 2003, based upon a 100% confidence level.

Questionnaire

The survey questionnaire addresses core response areas in the BSC Performance Measurement and Management Program including workload, tools and equipment, management, and procurement ethics.

The Procurement Employee Survey will ask employees to rate their agreement with 12 questions within a range of 1 (strongly disagree) to 5 (strongly agree) as well as an overall satisfaction rating (Poor, Below Average, Satisfactory, Highly Satisfactory, Outstanding). All of a respondent's ratings will be added and divided by the sum of all questions (except those left blank) to arrive at a Respondent Satisfaction Index for each respondent. A score of 3.0 or higher shall mean the respondent is satisfied. In addition, respondents will be asked to provide an overall satisfaction rating. Additional respondent comments will be evaluated.

Scoring

The following formula will be applied to measure Employee satisfaction:

$$\text{Employee Satisfaction Rating} = \frac{\text{Number of Satisfied Employees}}{\text{Total Number of Employees Responding to Survey}}$$

Survey results and comments for potential areas for improvement will be compared against the previous survey results to the maximum practicable extent and presented to Procurement management for review, analysis, and required action. Results will be reported in the year-end Self-Assessment.

Schedule

Surveying Milestones	Documentation	Scheduled Completion Date	Responsible Person
Distribute Written Employee Surveys	Survey Questionnaire	May 1, 2003	Chen
Compile/Analyze/Report Results	Year-End Self-Assessment	July 2003	Chen

Gradients

Unsatisfactory *< 60.0% of employees responding to survey are satisfied.*
Marginal *60.0% - 69.9% of employees responding to survey are satisfied.*
Good *70.0% - 79.9% of employees responding to survey are satisfied.*
Excellent *80.0% - 89.9% of employees responding to survey are satisfied.*
Outstanding *> 90.0% of employees responding to survey are satisfied.*

Performance Measure Results

Third Quarter Results

The FY-2003 Procurement employee survey covered topics relating to timeliness, quality work environment, efficiency, communications, openness to innovation, and ethics. The employees were asked to rate their agreement with 12 statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree), in addition to providing an overall performance rating (Poor, Below Average Satisfactory, Highly Satisfactory, or Outstanding) and any additional comments. All of a respondent's ratings are added and divided by the sum of all questions (except those left blank) to arrive at a satisfaction index for each respondent. A score of 3.0 or higher means the respondent is satisfied. For trending purposes, the survey's approach, sampling parameters, questionnaires, data compilation, and scoring methodologies were kept largely identical to the FY-2002 survey. The survey was administered to all Berkeley Lab Procurement employees (35) in May 2003.

Twenty-seven responses to questionnaires were returned prior to the deadline. The survey results indicated that 25 out of 27 respondents are satisfied, which produces an "Employee Satisfaction Rating" (number of satisfied employees ÷ number of respondents) of 92.6%. Two employees were not satisfied based on the evaluation criteria. The consolidated averaged rating of 4.3 for the 12 questions was found to lie between "neutral" and "strongly agree," and indicates that employees on the whole are highly satisfied. The respondents' averaged rating of overall satisfaction was above average, and indicated high satisfaction among the group.

Respondents gave the highest agreement with Questions 5 (I have the materials and equipment needed to work safely) and 6 (I successfully

perform the tasks assigned to me). The high scores attained were not surprising, since the two questions are related. Question 5, in particular, showed an improvement over last year, attributed to ergonomic and job safety reviews recently conducted. Question 3 (I am proud of the work I do) was the second highest rated question, with an average score of 4.5 (same as last year). This shows that employees continue to take pride in their accomplishments. Overall, averaged ratings of ten of twelve questions improved over last year (1, 2, 5, 6, 7, 8, 9, 10, 11, 12); one deteriorated (4); while one scored the same as last year (3). On the whole, none of the scores averaged below 4.0, compared with seven questions below 4.0 last year. This represents a notable achievement.

The results also presented some challenges. Questions 9 (My workload is usually manageable) and 12 (Management listens to my concerns and ideas) received the lowest averaged scores, followed by Question 4 (I have the tools to do my job). To address Question 4, new computers will be furnished to employees at the end of the fiscal year (one employee commented on needing new computers). Of all the questions, Questions 7 (I am treated fairly by management), 8 (I am recognized for doing a good job), and 12 (management listens to my concerns and ideas) had the biggest margin of improvement over the prior year, where all three questions were rated lowest. This is attributed to increased dialogue and improved communication between employees and management.

Other comments noted that were consistent with the ratings attained included: “New computers with better operating system are needed” and “Promote from within for the Distributed Small Purchasing Group.” Management has addressed both of these concerns. As noted above, new computers will be ordered by year-end. Additionally, the CFO continues to support the policy of hiring from within to the greatest extent practicable. This has resulted in the internal posting of a majority of new positions created under the newly formed Distributed Procurement Unit (DPU).

The overall survey response carried a positive tone and suggests that the following activities taken in FY 2003 to improve employee satisfaction have been effective:

- Filling of career CPO position
- PRP requester alert customization
- Updated subcontract terms and conditions, and procedures
- Maintained a high level of information availability
- Internal postings of new DPU positions
- Safety/ergonomic training and reviews
- Continuation of Limited Flexible Work Option Pilot

- Telecommuting; Suggestion Box, Spot Award Program, etc.
- Midyear booking of employee-requested training classes

Sub-Measure 4.2

Information Availability (Activity Value: 10 Points)
The Laboratory shall make readily available to its employees current information important to the successful performance of their procurement related functions.

Sub-Measure 4.2.a

Measuring Availability of Information (Activity Value: 10 Points)
The Laboratory will track, trend, and report the level of information available to Procurement employees. Information is considered available if it is current or requires only minor revision and the information is in compliance with Prime Contract requirements.

The following formula shall be applied to measure the level of information availability on a quarterly basis:

Level of Information Availability =

$$\frac{\text{Number of Information Items Available (End of Quarter)}}{\text{Number of Information Items Needed (End of Quarter)}}$$

The following formula shall be applied to measure the level of information availability for year-end reporting:

Level of Information Availability =

$$\frac{\text{Sum of Number of Reported Information Items Available (Four Quarters)}}{\text{Sum of Number of Reported Information Items Needed (Four Quarters)}}$$

Gradients (Year-End Reporting)

Unsatisfactory	*< 85.0%*
Marginal	*85.0% - 87.9%*
Good	*88.0% - 90.9%*
Excellent	*91.0% - 93.9%*
Outstanding	*≥ 94.0%*

Performance Measure Results

Third Quarter Results

Procurement's FY-2002 yearend reported Level of Information Availability was 92.66%, reflecting 922 available items out of 995 needed (total of 4 quarters). The FY-2002 Fourth Quarter result alone was 93.2% (234 available out of 251 needed). The following actions have transpired since that report:

First Quarter

- Seven Oracle purchasing system information items converted to PeopleSoft

- Revised Web links for SIC and Commerce Business Daily to NAICS and Federal Business Opportunities.

Second Quarter

- Added SP 4.9 (available)
- Updated status of SP 37.1 from not available to available.

Third Quarter

- Added SP 24.X, Health Insurance Portability and Accountability Act (not available).

Procurement's level of information availability for the Third Quarter was computed to be 93.3% (236 available out of 253 needed). Berkeley Lab's fiscal year-to-date result (subject to Fourth Quarter supplemental data adjustments) is 93.4% (706 available out of 756 needed). This meets the criteria for Excellent.

The Laboratory's performance by quarter is as follows:

End of First Quarter:	93.2% (234 items available; 251 items needed)
End of Second Quarter:	93.7% (236 items available; 252 items needed)
End of Third Quarter:	93.3% (236 items available; 253 items needed)
End of Fourth Quarter:	TBD

Supporting Data

All supporting data for PROAM activities are retained in procurement files and are available upon request.

Self-Assessment Report for Fiscal Year 2003

Project/Facilities and Construction Management

Ernest Orlando Lawrence Berkeley National Laboratory

Performance Characterization

The Facilities Division of the Lawrence Berkeley National Laboratory continues to meet all Performance Objectives for FY 2003. Projects were managed within approved budgets and schedules, and all construction milestones were met on or ahead of schedule. Operations and Maintenance has completed the last phase of our condition-assessment inspections, providing the platform that could be used to implement an ongoing system of identification and prioritization of capital-repair projects for the reduction of deferred maintenance and asset life-cycle/capital renewal within the Division. This fiscal year, there were twenty goals addressing energy management, all of which were met. Energy conservation programs continue at high performance levels, and energy-use reduction continues to exceed Executive Order requirements. There was only one unplanned outage this year. The number of unplanned customer-hour outages was reduced from 15,810 to 265, which increased the electrical-distribution-system availability from 99.9856% to 99.9998%.

Preamble

The University of California, in partnership with the Department of Energy (DOE), plans, acquires, operates, maintains, leases, and disposes of physical assets that are also valuable national resources. The management of physical assets from acquisition through operations and disposition is an integrated and seamless process linking the various life-cycle phases. Stewardship of these physical assets during all phases of their life cycle is accomplished in a safe and cost-effective manner to meet the DOE mission and to ensure protection of workers, the public, and the environment. This management of physical assets incorporates industry standards, a graded approach, and the performance objectives described in this chapter.

General Note: Plans, lists, and milestones are made a matter of record in the first month of the fiscal year. These plans, lists, and milestones may be revised during the year by mutual agreement between the Laboratory and DOE facility functional managers.

Performance Objective #1

Real Property Management: *The Laboratory effectively manages real property.* **(Weight = 5%)**

Summary

All mutually agreed milestones developed at the beginning of FY 2003 have been met as planned. Data to track Fourth Quarter results are on schedule and will be available at the end of the quarter. We anticipate all milestones to be completed as planned.

Objective #1 Criterion 1.1

Real Property Management: *Real property is effectively managed consistent with mission, requirements, and DOE direction.* **(Weight = 5%)**

Objective #1 Criterion 1.1 Performance Measure 1.1.a

Program Implementation: *Number of completed milestones/milestones scheduled for completion.* **(Weight = 5%)**

Assumptions:

The intent is to measure the effectiveness, completeness, and timeliness of implementation of real property management actions. Milestones are established in partnership with DOE and made a matter of record. Milestones may be established for Facilities Information Management System completeness, office space utilization, substandard building space conversion, real property leases, etc.

Gradient:

Unsatisfactory: Less than 0.60
Marginal: 0.60
Good: 0.70
Excellent: 0.80
Outstanding: 0.90

Performance Measure Result

As planned, we have completed all milestones scheduled for the Third Quarter. We have tracked and documented our progress.

Successes/ Shortfalls

In an effort to satisfy a new DOE space-banking requirement, the Laboratory successfully worked with DOE, the Berkeley Site Office (BSO), and UC Davis to identify and transfer sufficient space to offset our need for new space. Due to this response, the Molecular Foundry immediately progressed to Critical Decision 2 (CD-2) approval.

Supporting Data

See Table 1.1.a, Milestones

Table 1.1.a. Milestones

Real Property Category	Milestone Number	Goal	Deliverables / Completion Date	Qtr Due	Done
Facilities Information Management System (FIMS)	1	Ensure FIMS contains validated, complete, and accurate information.	Produce annual update to FIMS QA Plan.	1st	Yes
	2		Based on updated QA Plan, conduct periodic self-surveys and other cross-reference checks.	3rd	Yes
	3	Ensure consistency with MARS financial database.	Produce documentation that shows annual reconciliation between FIMS and MARS.	4th	
	4	Ensure the DOE Active Facilities Data Collection System (AFDCS) is updated and validated annually with complete and accurate information from FIMS.	Conduct annual AFDCS update process consistent with AFDCS QA Plan.	3rd	Yes
	5	Excess facilities reporting.	Prepare memo to DOE regarding space banking and reconcile information in FIMS.	2nd	Yes
Space Utilization	6	The Laboratory will optimize its total office-space utilization.	Document actions on space-utilization opportunities.	1st 2nd 3rd 4th	Yes Yes Yes
	7	Create available space through space-mining activities.	Identify and document opportunities.	2nd	Yes
	8		Select targeted opportunity and identify funding source.	3rd	Yes
	9		Place project on funding list.	4th	
Off-Site Leased Space	10	Provide essential space to perform mission.	Develop spreadsheet of current leasehold properties with appropriate data. Document requirements for the year.	1st	Yes
	11	Evaluate off-site leased options.	Document evaluation of off-site options, as required.	1st 2nd 3rd 4th	Yes Yes Yes
	12		Execute and document leasing activity, as required.	1st 2nd 3rd 4th	Yes Yes Yes

Real Property Category	Milestone Number	Goal	Deliverables / Completion Date	Qtr Due	Done
Building Condition and Suitability	13	Evaluate the current condition of LBNL buildings and trailers.	Facilitate building condition information from other Facilities disciplines and apply Laboratory's "Rehab and Improvement Cost" model. Document in FIMS, as appropriate.	1st	Yes
	14	Evaluate the suitability of LBNL buildings and trailers.	Apply LBNL/LLNL-developed Suitability Index methodology. Test the model and document results.	3rd	Yes

Performance Objective #2	**Physical Assets Planning:** *The Comprehensive Integrated Planning Process reflects current and future Laboratory needs.* **(Weight = 14%)**

Summary

We have achieved five key objectives with specific accomplishments set jointly with DOE. The objectives include:

- Site and Long-Range Planning
- Space Planning
- Project Planning
- Environmental Planning
- Communications

Objective #2 Criterion 2.1

Comprehensive Integrated Planning Process: *The Laboratory develops, documents, and maintains a comprehensive integrated planning process that is aligned with DOE mission needs.* **(Weight = 14%)**

Objective #2 Criterion 2.1 Performance Measure 2.1.a

Effectiveness of Planning Process: *Assess how the planning process is implemented to achieve maximum effectiveness in anticipating and articulating DOE and Laboratory needs.* **(Weight = 14%)**

Assumptions:

The Laboratory works with DOE counterparts in a cooperative effort to continuously evaluate the effectiveness of the comprehensive integrated planning process through the development of Laboratory-specific planning elements/milestones. Site-specific planning elements/milestones are made a matter of record.

Gradient:

Unsatisfactory: Less than 0.60
Marginal: 0.60
Good: 0.70
Excellent: 0.80
Outstanding: 0.90

Performance Measure Result

As planned, we have met all milestones to date, and are on schedule to complete the remaining milestones.

The five key planning areas and objectives are:

1. Site and Long-Range Planning. In order to anticipate and plan for the effective use and future development of land and capital assets at Berkeley Lab, we have continued to work with the Laboratory's strategic planners, senior managers, other Laboratory staff, DOE and UC counterparts, and community members in long-range planning activities. Planning documents have been developed or revised to reflect current direction, as appropriate: One such document is the Long-Range Development Plan (LRDP), which is prepared for the UC Regents and is a broad-based 20-year-plus outlook primarily on population projections, space growth, and land use; another document, the Strategic Facilities Plan, which is prepared for the DOE Office of Science, outlines the Laboratory's facilities and infrastructure priorities for the next ten years.

   As one of several site-planning activities, Berkeley Lab has taken an active role in vegetation management; the purpose is to preserve the natural character and environmental setting in a manner that revitalizes and improves the health of our groves and native grasses, reduces the

risk of wildland fires, and protects Laboratory assets and surrounding properties. We will continue to work with our surrounding neighbors, local fire departments, arborists, wildland-fire specialists, landscape architects, UC Berkeley faculty, the California Native Plant Society, East Bay Regional Park District, and other stakeholders in vegetation-management planning.

We will also continue to develop and refine our planning tools and analyses to find the most viable site-planning options and solutions. Tools may include the Geographical Information System (GIS) and other databases. Site analyses may include massing studies; parking, transportation, circulation studies; landscaping and signage development, etc.

2. Space Planning. The space-planning activities are another major area that is fully integrated in the comprehensive planning process. The Laboratory faces challenges of insufficient space and sub–General Services Administration (GSA) standards in utilization, aging and substandard facilities, changing space requirements, and inflexible facilities. The goals include managing the existing space effectively and developing options, such as evaluating off-site leases and third-party financed buildings, to accommodate future needs.

3. Project Planning. As requests for space and other projects continue to be realized, project-planning activities play an essential role. Systems have to be in place to review, prioritize, and rank all line-item construction projects, general plant projects (GPP), general plant equipment (GPE), and noncapital alterations (NCA). We will continue to work with cross-functional areas, improve our systems, and communicate priorities with the funding at hand.

4. Environmental Planning (National Environmental Policy Act [NEPA]/California Environmental Quality Act [CEQA]) Compliance. As the Laboratory's NEPA/CEQA Office, we have reviewed all Laboratory proposals for on- and off-site research, maintenance, construction, and programmatic and funding-related activities. We have processed and recorded those proposals already covered under existing NEPA/CEQA documentation and have maintained records of NEPA/CEQA decisions and determinations. For proposals requiring DOE-NEPA/University of California Office of the President (UCOP)–CEQA determination, we have prepared background research and recommendations and have forwarded them to DOE/UCOP in a timely manner; for proposed categorically excludable/categorically exempt projects, we have completed reviews in an efficient manner, typically within two weeks of receipt of all data. We have determined whether any proposals would require Environmental Assessment/Environmental Impact Statement (EA/EIS) or Initial Study/Environmetal Impact Report (IS/EIR) preparation, and have assisted DOE/UCOP with preparation of

these documents as necessary. We have continued preparation of an EIR for the proposed LRDP.

5. Communications. With the recommendations from the latest Facilities Peer Review, we will improve communications with Laboratory divisions regarding facilities-planning activities. The goal is to establish a communication plan tied to the divisional involvement to enable information flow and a more effective planning process.

Successes/ Shortfalls

Site and Long-Range Planning

- Berkeley Lab Institutional Plan FY 2004–2008, April 2003 draft
  - Revised Site and Facilities section.
- Berkeley Lab Strategic Facilities Plan, May 2003 draft
  - Prepared and submitted revision to DOE.
- LRDP and EIR
  - Established schedule to complete LRDP and EIR. (Critical path item: Health Risk Assessment will be completed by October 2003.)
  - Conducted composite constraints analyses.
  - Developed "hypothetical development option" in evaluating LRDP impacts.
  - Met with UC Berkeley planners and continued coordination of LRDPs.
- Conducted site development analyses for various building projects, such as Molecular Foundry (MF), Building 49, User Support Facility, User Housing Facility, Specialized Computing Facility, and Biological Research Facility.
- UC Regents
  - Helped prepare presentation of successful MF design for CEQA approval and for approval of various leased-land parcel modifications, such as Grizzly Substation and MF, to UC Regents.
- Contracted with two additional consulting firms, M+W Zander and Aviva Litman Cleper, to assist with planning analyses and process improvement.

Space Planning

- Research Clusters
  - Conceived research clusters as a way to tie space needs with site-development opportunities.
  - Developed and documented possible research clusters to identify reuse opportunities and upgrade existing space.
- Berkeley Lab Five-Year Capital Asset Plan
  - Developed and documented a proposal for six construction projects based on third-party financed opportunities.
- Alternative Financing
  - Developed and submitted white paper on Building 50X to DOE.
- Building 50X
  - Solicited and reviewed proposals for occupancy.

Project Planning

- Revised Process
  - To improve communications on proposed projects, briefed Laboratory senior managers on every GPP, GPE, and NCA to be funded for the year. Deputy Laboratory Director, Operations, presented projects to the Director's Action Committee (DAC). Project Call Process procedures were revised.

Environmental Planning

- Reviewed and processed approximately 200 research, construction, maintenance, and operations proposals for NEPA/CEQA compliance.
- Prepared environmental documentation for the following activities:
  - Berkeley Lab Contract Extension EIR Addendum
  - Part B Permit Renewal Addendum to the Hazardous Waste Handling Facility (HWHF) EIR
  - Molecular Foundry EA/Negative Declaration
  - Building 50X Negative Declaration
  - Building 51 Blocks Transport project
  - Grizzly Peak Electrical Substation lease documentation
  - Building 51 Removal of Excess Materials
  - Installation of Ethanol Aboveground Storage Tank at Building 76
  - Building 49 EIR
- LRDP EIR
  - Made substantial progress on the Health-Risk Assessment by submitting draft of protocol to the Bay Area Air Quality Management Board, developing chemical inventory, and initial chemical screening.
  - Prepared project description and scope of LRDP EIR.

Communications

- Continued to strive to improve communications on space-management-planning processes and long-range-planning activities.
- Provided quarterly updates to Facilities Division Director on projects to be discussed with the City of Berkeley.
- Refocused the planning meetings with UC Berkeley staff to discuss areas of mutual interest, including the LRDP and EIR, Building 49, and the disposition of the soil.
- Met with Laboratory neighbors and community members on planning issues such as the Molecular Foundry and Building 49.

Supporting Data

See Table 2.1.a, Milestones

Table 2.1.a. Milestones

Physical Asset Plng Category	Milestone Number	Goal	Deliverables / Completion Date	Qtr Due	Done
Site and Long-Range Planning	1	Develop and document necessary plans.	Prepare UC planning documents, such as the Long-Range Development Plan (LRDP). Track quarterly progress.	1st 2nd 3rd 4th	Yes Yes Yes
	2		Prepare DOE planning documents, such as the Strategic Facilities Plan (SFP). Track quarterly progress.	1st 2nd 3rd 4th	Yes Yes Yes
	3		Prepare other beneficial planning documents, such as landscape guidelines, parking surveys, etc. Track quarterly.	1st 2nd 3rd 4th	Yes Yes Yes
	4	Improve planning processes.	Review and refine planning tools, such as the Geographical Information System (GIS). Track quarterly progress.	1st 2nd 3rd 4th	Yes Yes Yes
Space Planning	5	Tie space needs with site-development opportunities.	Work with site planners to develop and document functional planning areas, based on space and population projections.	1st	Yes
	6		Develop and document possible scenarios of where research divisions, in growth modes, can expand.	3rd	Yes
	7		Develop concepts and document progress on third-party financed buildings, as appropriate.	1st 2nd 3rd 4th	Yes Yes Yes
	8		Evaluate Space Needs Assessment Program and modify or eliminate as necessary.	4th	
Project Planning	9	Improve project-planning process.	Incorporate feedback from Laboratory leadership and divisional coordinators, and revise process, as necessary.	1st	Yes
	10		Translate space requests into project proposals, as applicable. Document proposals.	3rd	Yes
	11		Conduct necessary project coordination meetings and prepare Director's Action Committee (DAC) presentations. Document meetings and presentations quarterly.	1st 2nd 3rd 4th	Yes Yes Yes

Physical Asset Plng Category	Milestone Number	Goal	Deliverables / Completion Date	Qtr Due	Done
Environmental Planning	12	Review all proposals for NEPA/CEQA compliance.	Review and process research, construction, maintenance, and operations proposals for NEPA/CEQA compliance. Track progress quarterly.	1st 2nd 3rd 4th	Yes Yes Yes
	13		Advise DOE and UC on level of compliance and prepare draft documents. Track quarterly.	1st 2nd 3rd 4th	Yes Yes Yes
	14	Develop Long-Range Development Plan Environmental Impact Report (LRDP EIR).	Develop LRDP EIR and any necessary assessments, studies, or analyses. Track progress quarterly.	1st 2nd 3rd 4th	Yes Yes Yes
Communications	15	Improve communications on planning activities.	Develop communication plan to incorporate comments from the FY02 Peer Review.	1st	Yes
	16		Discuss plan with Laboratory leadership and Facilities Director, and determine the feasibility of implementation.	2nd	Yes

Performance Objective #3

Project Management: *The Laboratory completes construction projects within approved budgets, schedules, and scopes.* **(Weight = 33%)**

Summary

Projects were managed within approved budgets and schedules. All 16 milestones were met on or ahead of schedule.

The following significant accomplishments took place during fiscal year 2003:

- Received approval of CD-1, Approve Preliminary Baseline Range, for the $13.25M Rehabilitation of Building Structure and Systems, Phase II. Building 77 is a 68,500 square foot (sf), high-bay, steel industrial facility that houses the Berkeley Lab Engineering Center for the design and fabrication of accelerator components, detectors, superconducting magnets, and other advanced scientific equipment and components for DOE research projects nationwide.

- Received CD-0, Approval of Mission Need, for the User Support Facility, a 30,000 gross square foot (gsf) facility to include a high-bay space for assembly of experimental equipment, semiclean staging areas, a wet laboratory, and office space. The facility will annually support over 2,000 scientific facility users.

- Beneficial occupancy of a new access road and issuance of the notice to proceed with construction of a new 200,000-gallon water tank in the East Canyon area of the Laboratory, as part of the Sitewide Water Upgrade project.

- Completion of design, construction, and conversion of approximately 2,700 sf of former shop space in Building 70A into an Earth Sciences wet laboratory. The scope included the demolition of existing solder hoods and equipment, the purchase and installation of chemical hoods, outfitting with lab benches, and the construction of a new office with soundproof walls, drop ceiling, and flooring.

- Issued the notice to proceed for the Base Radio Station, a critical component of the Laboratory-wide Radio Communications Systems Upgrade.

- Completion of beneficial occupancy for expansion of 2,500 sf of the computer floor at the Oakland Scientific Facility. The project included ceiling systems; extension of the seismically enhanced three-foot raised computer floor; computer-room heating, ventilating, and air conditioning (HVAC) systems; an underfloor chilled-water system to support floortop HVAC units; network-cable tray systems; laser-based

smoke-detection and underfloor fire sprinkler systems; connection of utilities; and seismic restraint of the computer equipment. Support utilities include expansion of the main chilled-water computer system in the basement. Beneficial occupancy was achieved ahead of schedule and under the project budget.

- Achieved beneficial occupancy of two projects in support of Building 6 beamline expansions. The Building 6 south-side expansion provides a hallway and lobby addition at the south side to allow expansion of Beam Line 12. Completion of the Building 6, Sector 4, Support Building provides 1,100 sf of equipment-staging area for Beamline 4.

Objective #3
Criterion 3.1

Construction Project Performance: *Construction projects greater than $500k (regardless of type of funds) achieve project performance objectives.*
(Weight = 20%)

Objective #3
Criterion 3.1
Performance Measure 3.1.a

Work Performed: *Number of objectives completed/number of objectives planned for completion.* **(Weight = 33%)**

Assumptions:

The intent is to measure actual progress against that planned for the fiscal year and for the Laboratory to execute projects and cost project funds in a timely manner. An objective list for all active projects is negotiated with DOE and made a matter of record. Only meaningful objectives are listed, but each active project has at least one objective per year. By mutual agreement between the Laboratory and DOE, objectives may be weighted for project significance, project size/cost, late/early completion, improved/diminished scope, etc. Negotiated objectives are not to be interpreted as baseline change approval.

Gradient:

Unsatisfactory: Less than 0.70
Marginal: 0.70
Good: 0.80
Excellent: 0.90
Outstanding: 1.00

Performance Measure Result

Eleven milestones were met. No calculation of performance was made, as this is an annual measure.

Successes/ Shortfalls

Sixteen milestones are scheduled to be completed by the end of the Fourth Quarter. Project types include:

- New construction
  - User Support Building
- Infrastructure upgrades
  - Sitewide water upgrade, radio communications systems upgrade, and Building 77 Rehabilitation, Phase II
- Facility expansions
  - Building 943, Oakland Scientific Facility (OSF) Computer-Room buildout
  - Building 6, Sector 4, addition
  - Building 6 south-side expansion
- Building alterations
  - Building 70A wet- and culture-lab modifications
  - Building 64 laboratory and office-space expansion

There were no shortfalls.

Supporting Data

See Table 3.1.a, Work Performed

Table 3.1.a. Work Performed

Project	#	Milestone	Milestone Date	Actual Date	Milestones Met
B70A Wet and Culture Lab Modifications	1	Complete Title II for space conversion to Stampfer Culture Lab and Stringfellow Wet Lab.	July 31, 2003	Feb. 10, 2003	1
	2	Complete construction of Stampfer Culture Lab ready for moves.	Sept 30, 2003		
	3	Issue Notice to Proceed with construction of Stringfellow Wet Lab.	Aug 29, 2003	Apr 21, 2003	1
B77 Phase II Rehabilitation	4	Phase II CD-1 Approval	November 1, 2002	October 21, 2002	1
	5	Issue Notice to Proceed to the A/E for Title 1 Design. ~~Submit CD-2 supporting Documentation to DOE for Approval~~*	Aug 1, 2003		
Radio Communications System Upgrade	6	Issue Notice to Proceed with BRS (Base Radio Station) Contract via DOE	April 30, 2003	March 14, 2003	1
	7	Complete radio tower.*	August ~~May~~ 30, 2003*		
	8	~~Completion Radio Equipment Installation/commissioning~~*	~~Sept 30, 2003~~		
B64 Add Lab/Office space	9	Complete Title II design for second floor labs and offices.*	August ~~June~~ 30, 2003*		
	10	~~Issue notice to proceed to contractor~~ *	~~Aug 29, 2003~~		
B58A Expansion	11	~~Complete Title II design for building Extension*~~ Project Cancelled	~~June 30, 2003~~		
	12	~~Issue notice to Proceed for construction of building*~~ Project cancelled.	~~Aug 29, 2003~~		
Sitewide Water Distribution Upgrade	13	Calvin Road Beneficial Occupancy*	June 30, 2003	June 3, 2003	1
	14	Notice to Proceed for FY03 Construction (New Storage Tank)	April 30, 2003	Feb. 24, 2003	1
	15	Notice to Proceed for FY03 Construction (Seismic Upgrade on Existing Storage Tanks)	April 30, 2003	Feb. 24, 2003	1

Project	#	Milestone	Milestone Date	Actual Date	Milestones Met
B74 Seismic Upgrade	16	Complete Title I ~~Title II~~ design.*	August 30, 2003		
B943 OSF Computer Room Buildout	17	Beneficial Occupancy	April 30, 2003	Jan. 17, 2003	1
B6 Southside Expansion	18	Beneficial Occupancy	June 30, 2003	June 23, 2003	1
B6 Sector 4 Addition	19	Beneficial Occupancy	Feb 28, 2003	Jan. 27, 2003	1
User Support Building	20	Submit CD-0 supporting documentation to DOE.**	March 15, 2003	Jan. 22, 2003	1
				TOTAL	11

* Milestone descriptions and dates modified as agreed with Warren Yip on 3/26/03 due to Continuing Resolution. ~~Based on January funding approval by January 1, 2003~~

** Based on DOE approval to proceed by December 6, 2002.

Performance Objective #4	**Maintenance:** *The Laboratory maintains capital assets to ensure reliable operations in a safe and cost-effective manner.* **(Weight = 33%)**
Summary	All 23 milestones in Performance Measure 4.1.a will be completed by the end of the Fourth Quarter.

Objective #4 Criterion 4.1

Facility Management: *Facility operations and maintenance are effectively managed consistent with mission, risks, and costs.* **(Weight = 33%)**

Objective #4 Criterion 4.1 Performance Measure 4.1.a

Program Implementation: *Sum of completion percentages for all milestones worked/milestones scheduled for completion.* **(Weight = 33%)**

Assumptions:

The intent is to measure the effectiveness and timeliness of the Laboratory's facility maintenance program. A list of mutually agreed milestones is made a matter of record. Milestones are established for internal performance indicators using Energy Facility Contractors Group (EFCOG) benchmarking elements, operational awareness activities, annual maintenance summary report, and others, as mutually agreed upon.

Gradient:

Unsatisfactory: Less than 60%
Marginal: 60%
Good: 70%
Excellent: 80%
Outstanding: 90%

Performance Measure Result

Fifteen FY-2003 milestones that were due in the First, Second, and Third Quarters were completed.

All twenty-three milestones will be completed by the end of the Fourth Quarter.

Successes/ Shortfalls

Successes
Operations and Maintenance has completed the last phase of our condition-assessment inspections, providing a platform that could be used to implement an ongoing system of identification and prioritization of capital-repair projects for the reduction of deferred maintenance and asset life-cycle/capital renewal within the division.

Shortfalls
The number of performance measures completed on schedule has decreased in comparison to those during past years.

Supporting Data

See Table 4.1.a, FY-2003 Maintenance Milestones.

Table 4.1.a. FY-2003 Maintenance Milestones

Milestone Number	Description	Qtr Due	Done
1	Complete FY02 By-Bldg. Maintenance Actuals Report	1st	Yes
2	Complete FY02 By-Bldg. & Site Deferred Maintenance Report	1st	Yes
3	Complete FY03 Annual & 5-yr. Maintenance Projects Plan	1st	Yes
4	Complete FY03 Beginning Backlog Projects Reconciliation List	1st	Yes
5	Complete Updated 5-yr. Property Inspection Plan	1st	Yes
6	Perform Quarterly Internal Maintenance Benchmarking	1st	Yes
7	Develop and Implement New Building Cost Report for Monthly/Yearly Assessment of Cost Breakdown (PM/CM/EM Work Types, Crafts, and Utility Costs) by Square Feet by Building Category.	1st	Yes
8	Complete Property Inspection Outsource Requisition	2nd	Yes
9	Complete FY03 By-Bldg Maintenance Requirements Report	2nd	Yes
10	Complete FY02 LBNL Annual Maintenance Executive Summary Plan	2nd	Yes
11	Perform Quarterly Internal Maintenance Benchmarking	2nd	Yes
12	Complete Implementation of PM program for Main Building Damper Systems	2nd	Yes
13	Complete Property Outsource Inspection	3rd	Yes
14	Schedule/complete DOE/OAK informal operation awareness site visit of maintenance program activity	4th	*
15	Perform Quarterly Internal Maintenance Benchmarking	3rd	Yes
16	Complete Property Outsource Inspection Report	4th	*
17	Complete Property Inspection Summary Report	4th	*
18	Complete Backlog Summary Report	4th	*
19	Perform Quarterly Internal Maintenance Benchmarking	4th	*
20	Complete enhancements/modifications to MAXIMO Safety Pilot Project	4th	*
21	Develop Fire Damper PM Plan	4th	*
22	Develop Lab Painting Standard Plan	4th	*
23	Develop Work Order Mobile Solution Plan	4th	*

***** Scheduled to be completed in the Fourth Quarter.

Performance Objective #5	**Utilities/Energy Conservation:** *The Laboratory maintains a reliable utility system and conserves energy.* **(Weight = 15%)**
Summary	There were twenty goals defined for this fiscal year that address the Energy Management Requirements defined in DOE Order 430.2A, all of which were met. Energy conservation programs continue at high performance levels, and energy-use reduction continues to exceed Executive Order requirements. There was one unplanned outage. While the Laboratory was prepared to issue Laboratory-wide e-mails to reduce electrical loads during utility-supply-deficiency warnings, no warnings occurred during this fiscal year.

Objective #5 Criterion 5.1	**Energy Management:** *Energy initiatives are managed consistent with a comprehensive energy management plan.* **(Weight = 15%)**
Objective #5 Criterion 5.1 Performance Measure 5.1.a	**Energy Goals:** *Energy goals accomplished/goals scheduled to be accomplished in accordance with the plan.* **(Weight = 15%)** **Assumption:** The energy management plan is made a matter of record. **Gradient:** **Unsatisfactory:** Less than 0.60 **Marginal:** 0.60 **Good:** 0.70 **Excellent:** 0.82 **Outstanding:** 0.90
Performance Measure Result	Nine goals were met through the Third Quarter of FY 2003. No calculation of performance was made, as this is an annual measure.
Successes/ Shortfalls	The number of unplanned customer-hour outages was reduced from 15,810 to 265, which increased the electrical-distribution-system availability from 99.9856% to 99.9998%. No shortfalls were noted.
Supporting Data	See Table 5.1 for supporting data.

Table 5.1. Energy Management Plan

Goal No.	Goal Category	Goal	Deliverable
1	The reduction in buildings Btu/GSF expressed as a percent of FY-1990 usage.	Review Laboratory and Process Load definitions, make changes to FIMS as appropriate, and report buildings' energy usage and GSF to DOE quarterly through Energy Management System (EMS-4).	EMS-4 Reports.
2	Implementing water-efficiency programs and plans.	Develop and submit FY-2003 Retrofit Project Abstract and Model Program proposals to DOE/Departmental Energy Management Program (DEMP) for water efficiency projects.	Copy of the proposals. **Complete**
3	Annual progress of at least 10 percent toward completing energy and water audits of all facilities.	Complete at least one energy or water audit.	Summary report showing Berkeley Lab facilities, square footage, and status of studies in each. Study report.
4	Progress toward installing all cost-effective energy and water-efficiency measures by January 2005.	Complete at least one energy or water retrofit.	Project report(s) documenting the expense of project funding and the results.
5	Annual progress toward qualifying buildings for the Energy Star® Building label.	Selection, data gathering, and calculation of Energy Star® Building qualification for at least one building.	Copy of Energy Star label screening tool results and application, if qualified.
6	Application of sustainable design principles to new buildings.	Produce a report for the Molecular Foundry showing compliance with California Title 24 energy-efficiency requirements.	Copy of the report. **Complete**
7	Application of sustainable design principles to new buildings.	Produce a report for the Molecular Foundry, using the Leadership in Energy and Environmental Design (LEED) rating system as a basis for evaluation, stating which sustainable design elements will be included in the design or are recommended for inclusion in the design based on cost/benefit.	Copy of the report. **Complete**
8	Selection of DOE/Environmental Protection Agency (EPA) Energy Star® products.	Distribute Federal Energy Management Program (FEMP) procurement guidelines and product recommendations to Programmatic specifiers of equipment.	Records of materials distributed.
9	Identify low-cost energy conservation deficiencies.	Review FY-2002 Property Inspection Report and summarize the low-cost energy conservation deficiencies identified.	Summary report of low-cost energy conservation deficiencies identified.
10	Minimization of the use of petroleum-based fuels by switching to natural gas.	Develop and submit a FY-2002 Model Program Project proposal to evaluate options for employing compressed natural gas (CNG) vehicles at Berkeley Lab.	Copy of the proposal. **Complete**
11	Increased use of alternative funding mechanisms.	Apply for all rebates, grants, and other financial incentives applicable to Berkeley Lab facilities projects, if any.	Copies of applications.

Goal No.	Goal Category	Goal	Deliverable
12	Increased use of alternative funding mechanisms.	Provide technical support services to Federal Energy Management Program (FEMP) and other federal agencies.	Summary report of franchising activities. **Complete**
13	Energy management training.	Provide a total of five person-days of energy-efficiency, water-conservation, or utilities-analysis training.	Records of class attendance. **Complete**
14	Increased use of on-site renewable energy generation systems.	Develop and submit a FY-2003 Retrofit Project proposal abstract to DOE DEMP for a photovoltaic power station pilot project.	Copy of the proposal abstract. **Complete**
15	Control loads to minimize utility costs.	Continue the conversion of the Barrington Energy Management Control System (EMCS) to the JCI Metasys.	Project technical and financial documents.
16	Control loads to mitigate the impact of disruptions in the supply of energy.	Issue lab-wide e-mails to reduce electrical loads during supply deficiency Level 1, 2, or 3 Warnings.	Copies of e-mails distributed.
17	Control loads to mitigate the impact of disruptions in the supply of energy.	Update the LBNL emergency conservation plan, including detailed plans to operate the 2 mW generator during electrical supply deficiency occurrences.	Copy of the plan.
18	Performance evaluations and employee incentive programs.	Include the minimization of utilities cost and consumption in applicable employee position descriptions, and reward exceptional performance.	Copies of position descriptions, awards program data, and any nominations. **Complete**
19	Outreach programs to motivate employees to become more efficient in their use of energy.	Energy Awareness Month activities including e-mail memos, distribution of posters, and the displaying of banners. Holiday Shutdown activities including suggestions for employee action.	Copies of applicable publications and photographs. Copies of request for employee cooperation and estimate of savings. **Complete**
20	Maintain reliable electrical utility service.	Total number of customer hours of electric service less the number of customer hours of unplanned outages/total customer hours will be at least 99.982%. See Note 1.	Copy of calculation.

Note 1: A planned outage is a loss of power that has been coordinated with building occupants with sufficient prior notification to minimize loss of work, or is the result of an emergency plan to minimize loss of property damage or risk to personnel safety. Unplanned outages caused by occurrences outside the boundary of the Laboratory's electrical system, inside buildings, or outside the direct control of the Laboratory (e.g., natural disasters or acts of war) will be reported but not included in the calculation. Any other outage will be included in the calculation. A 12-month running average will be reported. A customer is defined as 5 kVA of rated capacity. An adjustment in the calculation may be made by mutual agreement to account for such factors as substations with light loads.

Property Management

Performance Characterization

A total of 483 points were accumulated during FY 2003, based on the Performance Property Assessment Model (PPAM), out of a possible total 500 points. An Outstanding rating was achieved in all areas except two. The two areas where points were not fully earned were in field–tagging of assets within the 15-day time frame, due to the recent Control number effort, and the accurate assignment of custodians. In each of these areas, a rating of Good was achieved.

During FY 2003, the Property Management organization was challenged by several initiatives and DOE oversight actions. One initiative involved significant modification of the PPAM, which has been used for the last five years. A second initiative, an Office of Science (SC)/LBNL initiative, focused on determining the best business practices from the ten SC laboratories. To define these best business practices, all SC property managers were invited to participate; all agreed. Berkeley Lab then prepared a survey, which each representative was asked to complete to establish a baseline. Finally, the property managers met via conference calls to discuss the various approaches and issues. Performance Measure 1.1.b below describes these best business practices and how they are being implemented at Berkeley Lab.

Two primary events seriously affected Property Management's workload in FY 2003. The first was the three audits performed by various DOE and General Accounting Office (GAO) offices. During these audits, the vast majority of sensitive, controlled, and material assets were located and verified, a work effort that required a significant time by core Property staff, division business managers, property representatives, and property coordinators. The audits resulted in no significant findings, but they did recommend improved practices in Berkeley Lab property identification and record keeping, recommendations that have been fully implemented.

The second event was an internal audit during mid-2003 that disclosed approximately $76 million of capitalized fabrication assets booked between 1987 and 1998 that were not properly identified and reported in the general ledger. These assets have been reviewed for appropriate identification and disposition and have been accounted for accordingly. Fiscal year-end balances accurately reflect fixed assets and related depreciation on LBNL financial reports.

BERKELEY LABORATORY
FY2003
PROPERTY MANAGEMENT

	Measured Activities / Sub-Gauges Activity/Support Processes	BSC Ref*	Gradient 60/70/80/90/100	Activity Value	Activity Score	Core Measures Critical Activity	Total Points for Activity	Desired Outcomes Final Product
	PRODUCT QUALITY							
1	**The Quality of the Personal Property Inventory**							
1.1.a.1	The Laboratory will inventory sensitive assets.	C.1/L.1	<98.0/98.0/98.7/99.2/99.5	100	99.8	Property and	100	**Accountability for Equipment, Sensitive Property, and Precious Metals**
1.1.a.2	The Laboratory will inventory equipment assets.	C.1/L.2	<98.0/98.0/98.7/99.2/99.5	100	99.9	Precious metals	100	
1.1.a.3	The Laboratory will account for precious metals.	C.1/L.1	<98.0/98.0/99.0/99.6/99.8	50	100	Accounted For	50	
							250	
	The Quality of the Database							
1.2.a.1	Receiving will tag new assets when received.	C.1	<85/85.0/90.0/95.5/98.0	25	98.0		25	
1.2.a.2	Property will tag assets requiring field tagging within 15 d	C.1/.3/I.1	<85/85.0/90.0/95.5/98.0	25	90.0	Identification	20	
1.2.a.3	Property will verify if in-service assets are recorded in dat	C.1/.3/I.1	<85/85.0/90.0/95.5/98.0	25	99.7		25	
							75	
2	**Accountability**							
2.1.a.1	Property will verify if assets are accurately assigned to custodians by Divisions.	C.1	<85/85.0/90.0/95.5/98.0	60	92	Accountability	48	**Stewardship**
2.1.a.2	Property will verify if new assets are assigned to a custodian within 60 days of entering into the property management database.	C.1/C.3	<85/85.0/90.0/95.5/98.0	40	99.8		40	
							100	
3	**Vehicle Utilization**							
3.1.a.1	Does discretionary vehicle classification meet utilization c	C.1/L.2	<85/85.0/90.0/95.5/98.0	13	105	Fleet Management	13	**Vehicle Utilization**
3.1.a.2	Does essential vehicle classification meet utilization criter	C.1/L.3	<85/85.0/90.0/95.5/98.0	12	111		12	
							25	**25**
	PROCESS QUALITY							
4	**Data System Assessment**					Assessment of		**Reliable Process**
4.1.a	Property will assess the accuracy and the completeness of data in the property management system.	1.1/I.3	Evaluation of Report	50	50	Data System	50	**Control**
								Documentation
							50	**50**

BSC References:
C = Customer
I = Internal Business Processes
L = Learning & Growth
F = Finance

483
500

>=475 Outstanding
>=450 Excellent
>=400 Good
>=352 Marginal
<352 Unsatisfactory

Performance Objective #1

Personal Property Excellence: *The Laboratory will maintain a personal property system that ensures Property programs incorporate best practices as applicable, promotes customer service, and operates in accordance with policies and procedures approved by DOE and the requirements of the Prime Contract.* **(Weight = 100%)**

Summary

There are 11 performance measures in the PPAM. Completion of the measures fall into the following time frames:

- Sensitive and controlled personal-property inventories have been completed.
- Five require monthly performance data. The Laboratory has nine months' worth of data incorporated in the self-assessment report.
- Four consist of performance measures that were completed at the end of September.

Even though the Laboratory has experienced significant challenges in this performance period, we have managed to improve the property-management system at Berkeley Lab. For example, this year Laboratory senior management and division directors are more aware of property-management issues. In addition, both the Life Sciences and Environment, Health, and Safety (EH&S) divisions incorporated property-management performance expectations into their employees' annual Performance Review and Development (PRD) process, for which we made a concerted effort; we now feel the Laboratory has the necessary support to see this occur Laboratory-wide.

In addition to the formalized performance measures that are part of the PPAM, the Laboratory has developed the new best-business-practices measure described in Performance Measure 1.1.b. This process has been a success for all parties involved, and it is planned that the Laboratory will continue the process with monthly conference calls next fiscal year. However, we plan on approaching the effort in a modified format to ensure a higher level of participation and results from the effort.

Objective #1
Criterion 1.1

Assessing Degree of Excellence Achieved: *The Laboratory documents and reports its performance results against established sub-measures contained in the Personal Property Assessment Model (PPAM), and will collaborate with other SC Laboratories in searching for the availability of property best practices and nationally recognized standards for adoption into Laboratory property operations.* **(Weight = 100%)**

Objective #1
Criterion 1.1
Performance Measure 1.1.a

Measuring System and Service Levels: *An overall score will be used to determine the approval status of the Laboratory Personal Property Management System. The score is based on points achieved against the established sub-measures in the PPAM. The PPAM provides the management system framework that establishes and maintains a customer focus, a continuous and breakthrough process improvement culture, and an emphasis on results.* **(Weight = 90%)**

Gradient:

Points	Rating
≥ 475 Points	Outstanding
≥ 450 Points	Excellent
≥ 400 Points	Good
≥ 352 Points	Marginal
< 352 Points	Unsatisfactory

Sub-Measure 1.1.a.1 **Product Quality: The Quality of the Personal Property Inventory.**

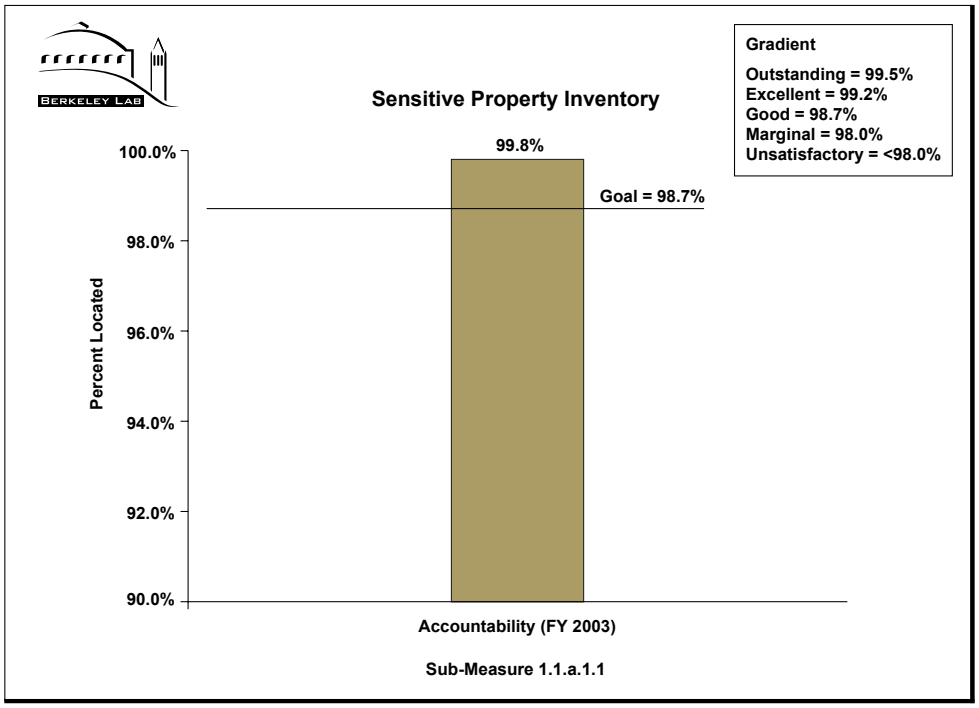
Sub-Measure 1.1.a.1.1 **The Laboratory Will Inventory Sensitive Assets.**

Performance Measure Result

Rating:		Outstanding	100 Points Earned Out of 100			
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of Sensitive Assets Located	Target = 98.7%	N/A	N/A	99.8%	N/A	99.8%
Acquisition Value of Sensitive Property Assets Inventoried and Accounted For		N/A	N/A	7,183,645	N/A	7,183,645
Acquisition Value of the Sensitive Property Assets in the Inventory Sample		N/A	N/A	7,196,027	N/A	7,196,027

Comments

A total of 1,726 sensitive assets with an acquisition value of $7,196,027 represented the base for the statistical sample inventory. A total of 1,723 sensitive assets with an acquisition value of $7,183,645 were located, resulting in an accountability rate of 99.8%. A DOE representative participated in the validation of 42 inventoried assets. The statistical sample was based on a 99.9% confidence level, 1% error rate, and 2% precision rate.



Sub-Measure 1.1.a.1.2

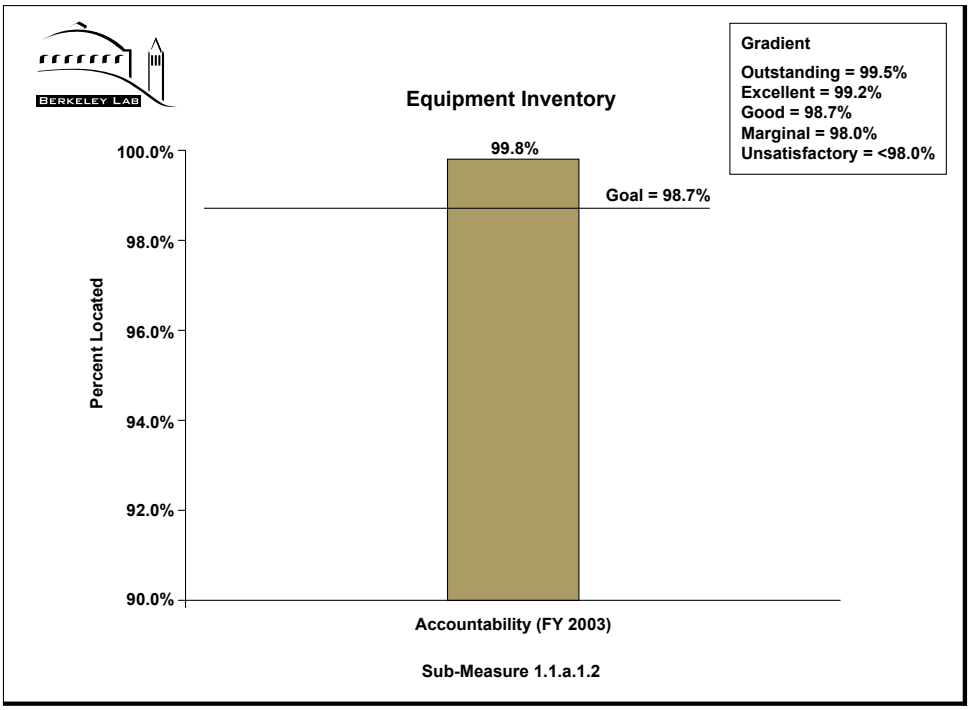
The Laboratory Will Inventory Equipment Assets.

Performance Measure Result

Rating:		Outstanding		100 Points Earned Out of 100		
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of Equipment Assets Located	Target = 98.7%	N/A	N/A	99.8%	N/A	99.8%
Acquisition Value of Equipment Assets Inventoried and Accounted For		N/A	N/A	68,526,685	N/A	68,526,685
Acquisition Value of Equipment Assets in the Inventory Sample Equipment Assets		N/A	N/A	68,600,538	N/A	68,600,538

Comments

A total of 1,640 equipment assets with an acquisition value of $68,600,538 represented the base for the wall-to-wall inventory. A total of 1,631 equipment assets with an acquisition value of $68,526,685.06 were found, resulting in an accountability rate of 99.8%. The Laboratory was unable to account for nine assets with an acquisition value of $73,853. The oldest asset had an acquisition date of 1958; the newest asset had an acquisition date of 1995. A DOE representative participated in the validation of 42 inventoried assets. The statistical sample was based on a 99.9% confidence level, 1% error rate, and 2% precision rate.



Sub-Measure 1.1.a.1.3

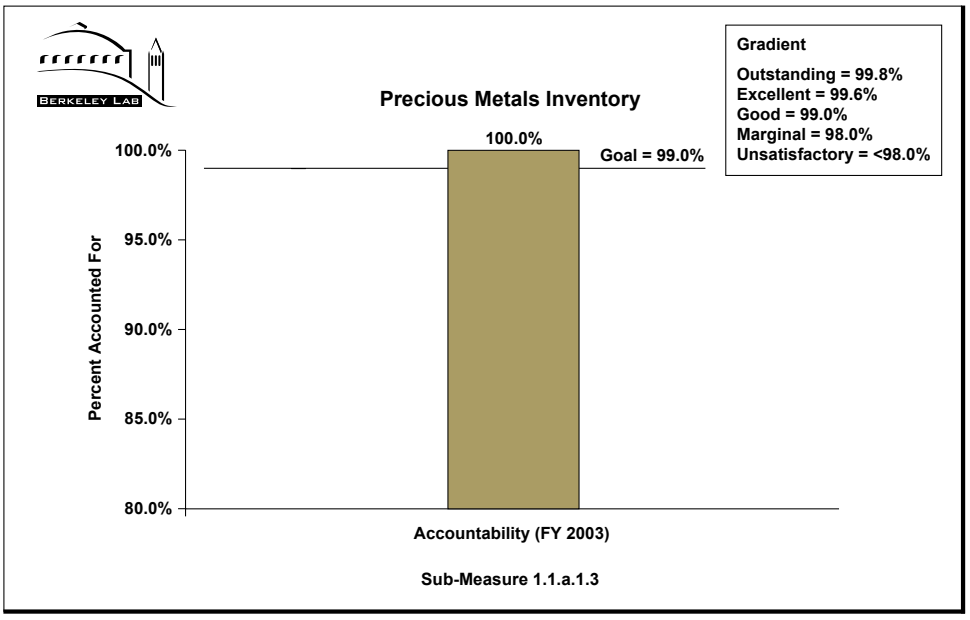
The Laboratory Will Account for Precious Metals.

Performance Measure Result

Rating: Good		40.0 Points earned out of 50				
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of Precious Metals Accounted For	Target = 99.0%	N/A	N/A	N/A	100%	100%
Grams of Precious Metals Accounted For		N/A	N/A	N/A	38,347	38,347
Total weight in Grams Precious Metals in Database		N/A	N/A	N/A	38,347	38,347

Comments

The precious-metals inventory was completed by September 2003. All precious metals were accounted for.



Sub-Measure 1.1.a.2 **Product Quality: The Quality of the Database.**

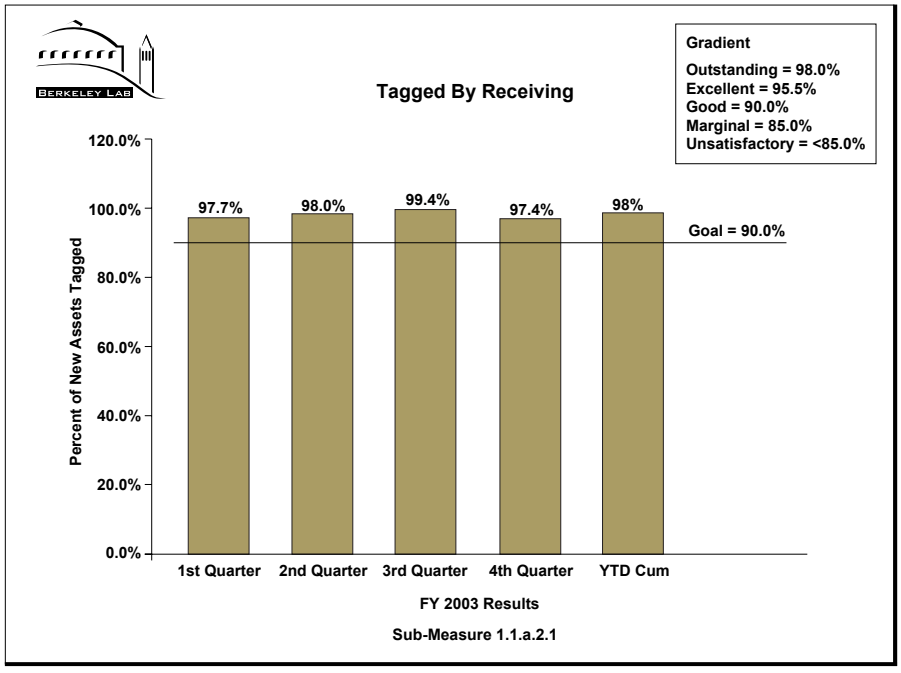
Sub-Measure 1.1.a.2.1 **Receiving Will Tag New Assets When Received.**

Performance Measure Result

Rating: Outstanding		**25.0 Points Earned Out of 25**				
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of New Assets Tagged at Receiving	Target = 90.0%	97.7%	98.0%	99.4%	97.4%	98%
Number of Assets to be Tagged at Receiving that Received an Inventory Label.		1,713	1,584	2,044	3,549	8,890
Total Number of Assets Received that Require an Inventory label		1,753	1,617	2,056	3,644	9,070

Comments

Receiving places the Property identification label on assets as they are received and documents its actions in the Receiving "Comments" field of the Purchasing system. Property Management staff then evaluate purchasing reports for assets received to determine whether they meet tagging criteria; this provides a crosscheck to determine if Receiving staff are tagging all assets that require an identification label. All untagged assets are then investigated for tagging. This report adds significant value to the identification and receiving process.



Sub-Measure 1.1.a.2.2

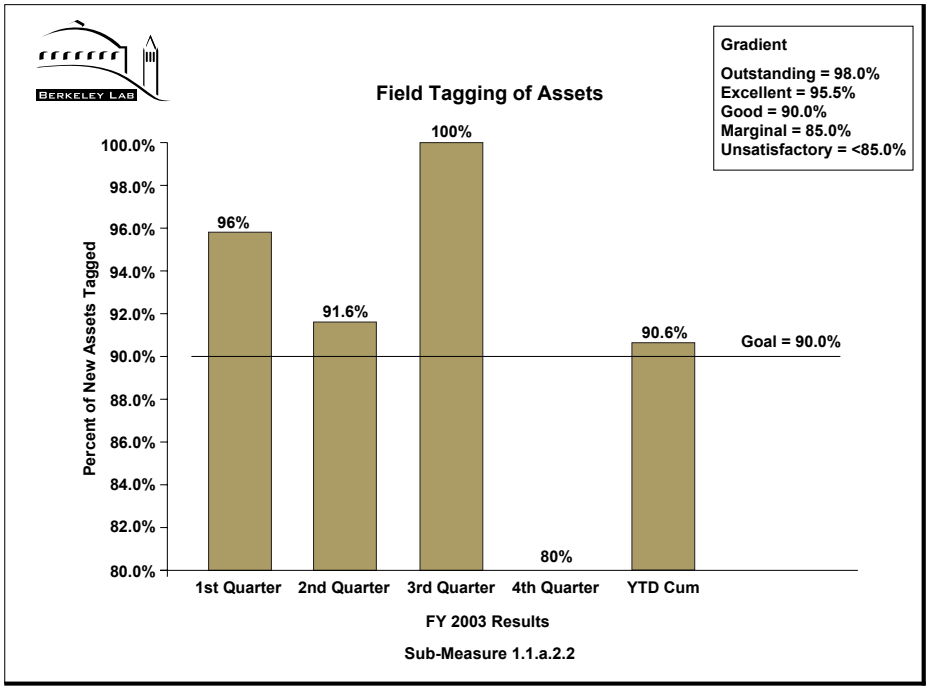
Receiving Will Tag Assets Requiring Field Tagging Within 15 Days.

Performance Measure Result

Rating: Good		20 .0 Points Earned Out of 25				
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of New Assets Field Tagged within 15 Days	Target = 90.0%	96%	91.6%	100%	80%	90.6%
Number of Assets to be Tagged within 15 Days of Notification when Property Management Is Notified and Asset Is Ready for Field Tagging		24	22	11	20	77
Total Number Of Items that Require Field Tagging		25	24	11	25	85

Comments

In FY 2003, Property Management staff was responsible for field tagging assets not identified during the Receiving process. Due to the lower performance in the First, Second, and Fourth Quarters, we are evaluating alternative methods for this procedure and anticipate working with divisional property representatives to reassign the field-tagging task. The Laboratory is currently working with the Administrative Services Department (ASD) regarding this effort. The tagging of assets responsibility changed from Receiving to Property Management during the First Quarter of FY 2003.



Sub-Measure 1.1.a.2.3

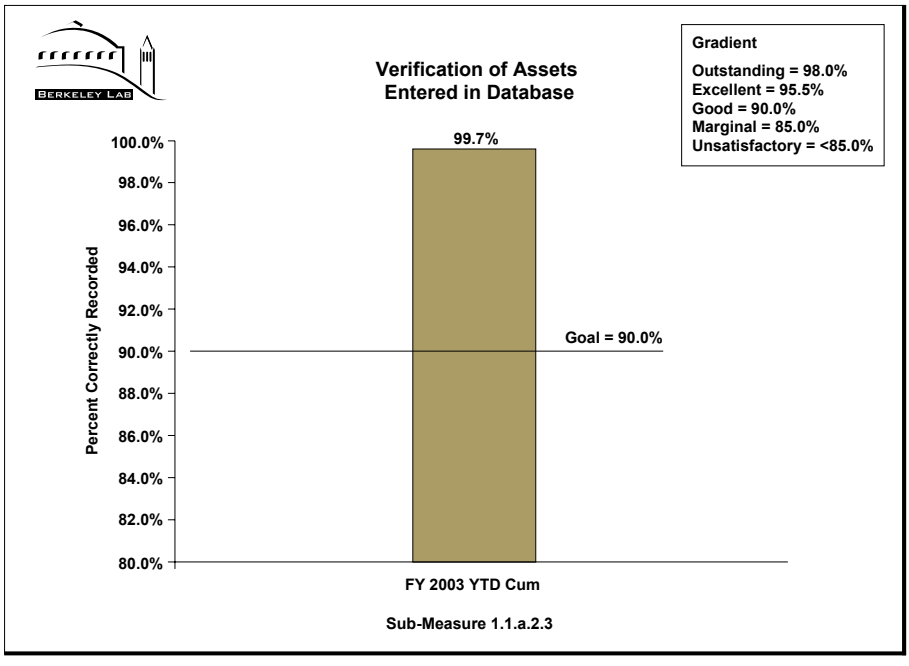
Property Will Verify If In-Services Assets Are Recorded in Database.

Performance Measure Result

Rating: Outstanding		25.0 Points Earned Out of 25				
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of Sampled Assets Correctly Recorded in the Database	Target = 90.0%	N/A	N/A	100%	99.7%	99.7%
Number of Sampled In-Service Assets Recorded in the Database		N/A	N/A	102	274	376
Total Number of In-Service Assets Selected during the Property Review		N/A	N/A	102	275	377

Comments

Property Management performs property reviews of one-third of the Laboratory divisions per year. In FY 2003, seven divisions were selected for review, and a schedule was finalized in September of FY 2002; however, due to various audits (DOE/HQ, IG, and GAO), it was necessary to delay the property reviews. Two reviews of 102 assets were completed during the Third Quarter; two reviews were completed in July, resulting in 155 assets selected and 154 assets found in the property database, equating to 99.7% accuracy. Three divisions were completed in September, which consisted of 120 assets, totaling 377 total assets, with only one not recorded properly.



Sub-Measure 1.1.a.3 **Product Quality: Accountability.**

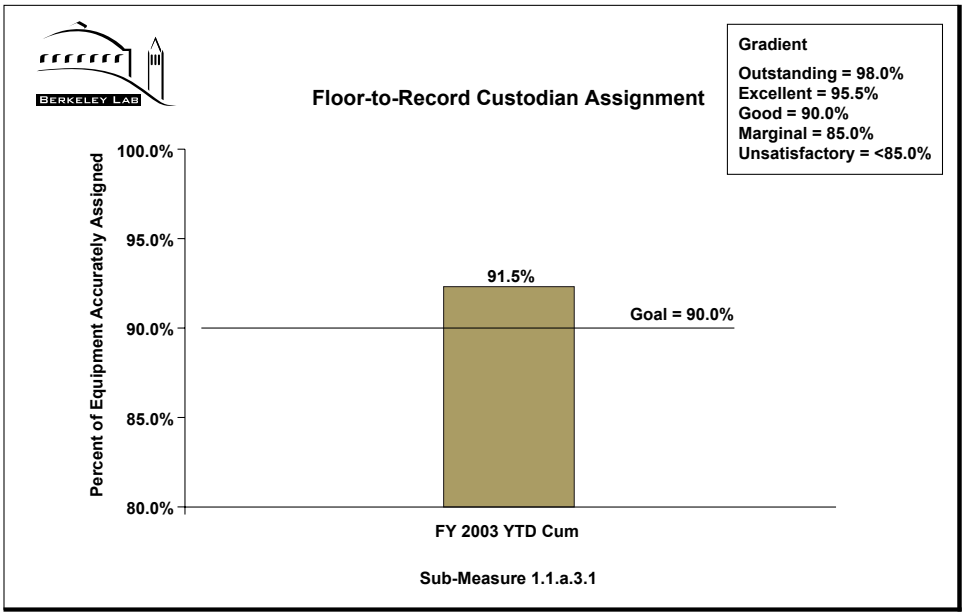
Sub-Measure 1.1.a.3.1 **Property Will Verify Whether or Not Divisions Have Accurately Assigned Assets to Custodians by Divisions.**

Performance Measure Result

Rating: Good		**48.0 Points earned out of 60**				
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of Equipment Accurately Assigned to Custodian	Target = 90.0%	N/A	N/A	90.2%	92.0%	91.5%
Number of Accurate Custodian Assignment Database Records in Sample		N/A	N/A	92	253	345
Number of Sampled Property Assets		N/A	N/A	102	275	377

Comments

Property Management performs property reviews on one-third of Laboratory divisions per year. In FY 2003, seven divisions were selected for review, and a schedule was finalized in September of FY 2002; however, due to various audits, it was necessary to delay the property reviews. Seven divisions participated in the property reviews, equaling 345 accurate custodian assignments out of 377 assets for this performance measure. The DOE/OAK Organizational Property Management Officer is invited to participate in all property reviews.



Sub-Measure 1.1.a.3.2

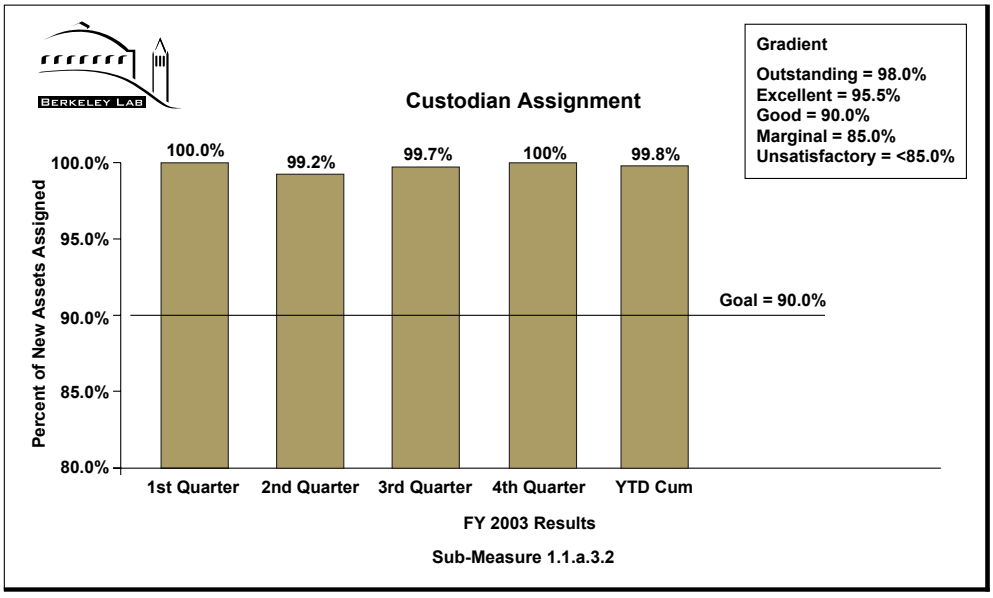
Property Will Verify if New Assets Are Assigned to a Custodian Within 60 Days of Entry into the Property Management Database.

Performance Measure Result

Rating: Outstanding			40.0 Points Earned Out of 40			
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of New Assets Assigned to a Custodian within 60 Days	Target = 90.0%	100.0%	99.2%	99.7%	100%	99.8%
Number of New Assets Assigned to a Custodian Within 60 Days		1,013	246	667	724	2,650
Number of New Assets Available for Custodian		1,013	248	669	724	2,654

Comments

Custodian-assignment results continue to indicate a very successful program relative to the support provided by Property Representatives. To maintain this level of support, the Property Office performs weekly and monthly analyses. A stepped process has been implemented to ensure the timely assignment of custodians.



Sub-Measure 1.1.a.4 — **Product Quality: Vehicle Utilization.**

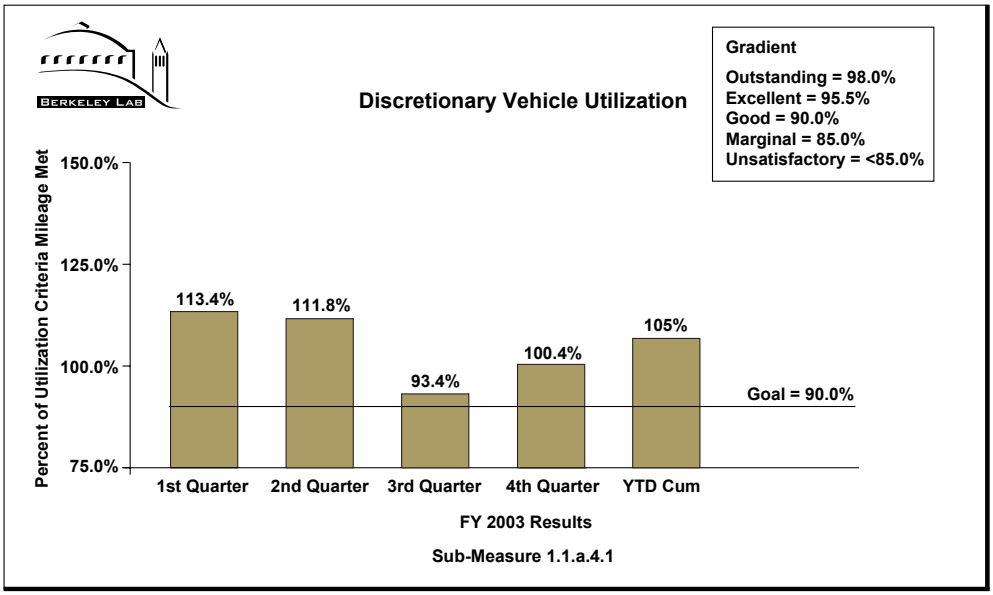
Sub-Measure 1.1.a.4.1 — **Does the Discretionary Vehicle Classification Meet Utilization Criteria?**

Performance Measure Result

Rating:		Outstanding	13 Points Earned Out of 13			
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of Utilization Criteria Mileage by Discretionary Vehicles	Target = 90.0%	113.4%	111.8%	93.4%	100.4%	105%
Number of Vehicles		49	49	41	60	
Average Monthly Mileage for All Discretionary Vehicles.		37,493	36,979	25,847	40,682	134,325
Required Average Monthly mileage per Discretionary Vehicles.		33,075	33,075	27,675	40,500	141,000

Comments

During the first three quarters, the Laboratory met its goal for use of discretionary vehicles. The utilization criterion was 225 miles per vehicle per month. The number of vehicles, by quarter, was multiplied by the utilization criteria to derive the required mileage per period, and compared against the actual utilization. During the Fourth Quarter, there was an eleven-vehicle increase in the fleet from the beginning of the fiscal year.



Sub-Measure 1.1.a.4.2

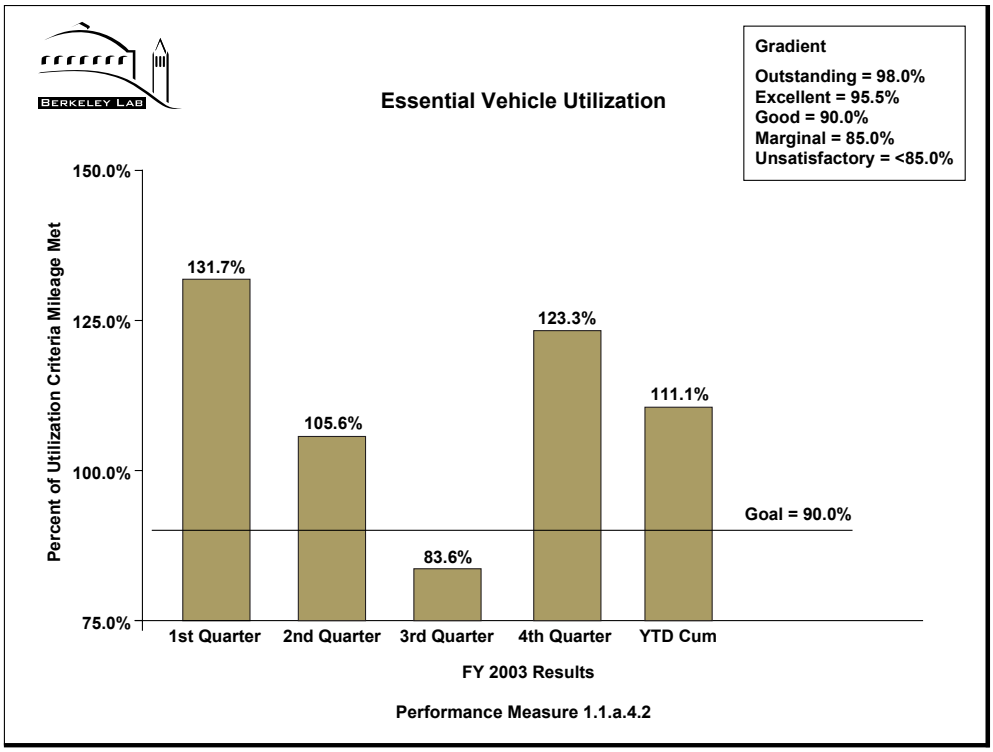
Does the Essential Vehicles Classification Meet Utilization Criteria?

Performance Measure Result

Rating: Outstanding			**12 Points Earned Out of 12**			
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of Utilization Criteria Mileage by Essential vehicles	Target = 90.0%	131.7%	105.6%	83.6	123.3%	111.1%
Number of Vehicles		204	204	198	192	
Average Monthly Mileage for All Essential Vehicles.		181,300	145,371	111,677	159,812	598,160
Required Average Monthly mileage per Essential Vehicles.		137,700	137,700	133,650	129,600	538,650

Comments

The Laboratory met its goal for use of essential vehicles during FY 2003. The utilization criterion was 225 miles per vehicle, per month. The number of vehicles, by quarter, was multiplied by the utilization criteria to derive the required mileage per period, and to determine the actual utilization. During the Third and Fourth quarters, there was a six-vehicle reduction in the fleet per quarter.



Sub-Measure 1.1.a.5

Process Quality: Data System Assessment.

Sub-Measure 1.1.a.5.1

Property Will Assess the Accuracy and Completeness of Data in the Property Management Database.

Summary

As part of the FY-2003 PPAM, the previous Assessing Support Processes of borrows, loans, excess activities, controlled substances, etc., was replaced by a new performance measure, which assesses the accuracy of data in the property database.

This process was combined with the property-review procedure already in place; the only variance was that for 10% of the property-review samples, the following five data elements were recorded:

- Property number
- Nomenclature
- Manufacturer
- Model number
- Serial number

There are no gradients for this measure, and the points earned are based on this report, out of a possible 50 points.

Performance Measure Result

Floor-to-Record Evaluation of Personal Property Database

The purpose of the new Data System Assessment Methodology measure was to assess, during property reviews conducted in FY 2003, the accuracy of data entered into the property database. An agreement was reached with DOE/OAK and UCOP whereby 10% of the property assets examined during property reviews would be selected, and the following data elements would be verified:

- Property number
- Nomenclature
- Manufacturer
- Model number
- Serial number

If discrepancies were found, Property Management would determine the basis of the discrepancies, e.g., typographical errors, errors based on information provided by Receiving staff, errors from the manufacture packing lists, etc.

In the process of performing the work, Property Management identified data-entry discrepancies that the Laboratory found to be processing

variances. The Laboratory did not count these variances as discrepancies. Examples of these processing variances are listed below.

- If a property custodian told us during the property review that their computer was a computer or a PC, laptop, or a workstation, the Laboratory recorded the asset as a computer/PC. The Laboratory considered any one of the four identifiers as acceptable, since the Property Management office identifies all computers with the exception of servers and supercomputers as a computer/PC.
- The Laboratory also identified examples where the serial or model number in the property database was correct, but numbers recorded in the field included dashes, slash marks, or spaces. In order to standardize the process, especially for future queries, these special characters and blanks are excluded from the database.

Although the Laboratory did not count the above processing variances as discrepancies, these variances have been uniquely identified and recorded in the Work Sheets the Laboratory used to document the results of the data-validation process.

The Laboratory completed property reviews for seven divisions. A total of 378 assets, which equals 10% of each division's asset holdings, represented the base population. From that base, 10% of each division's assets were used as a basis for evaluating the Data System Assessment. The 10% was rounded to 39 assets. Five data fields were compared from the field to the record for this measure. In total 195 (39 x 5) data elements were compared using this process, with a result of 156 data-element matches, equaling an 80% accuracy rate. However, the 39 variances out of the 195 were for a variety of reasons. The reasons are listed below:

- The largest number of discrepancies (15) occurred in the model-number field. There were three primary reasons for these discrepancies. The first was that the model was entered from the Receiving record correctly, but in comparison to the data on the asset, the model numbers provided were incorrect. The second series of model-number discrepancies was caused by not all the model number characters being entered into the property database, in comparison to the data taken from the field. For example, in one case 11 of the 15 characters matched, but the asset had an additional 4 characters that were not in the property database. The third largest discrepancy in model numbers was a transposition of numbers. In reality, Berkeley Lab has come to the conclusion that there may have been a mistake in gathering the data from the field. The most common discrepancy in transposition was the character 'l' versus the number '1'. This aspect of the work effort will be refined in the following year as we continue to perform this analysis.

- The second most significant issue relative to comparing the field data to the property database was the fact that we were unable to locate copies of the original source documents in 14 cases. Therefore, Berkeley Lab could not conclude whether or not it was a data-entry error from Receiving or the Property Office, or even a transposition error. Similar to the previous conclusion, we anticipate modifying our selection process to ensure a higher possibility of obtaining the source documents.

- Berkeley Lab also found that there were a number of cases where the model was taken from the manufacturer's label on the front of the unit, whereas the model number from the manufacturer's plate was completely different. In essence, both were correct, since the user would refer to the asset by the name or model number displayed on the front, while our evaluation methodology was based on the manufacturer's plate. Berkeley Lab anticipates changing our approach and potentially obtaining feedback from the other SC laboratories to determine if they have developed a better approach for resolving this issue.

- The variance between manufacturer and supplier was the next most common discrepancy. This occurred in five cases. Even though we have previously discussed this issue with Receiving staff, it is obvious that we need to work more closely with them to ensure that the correct manufacturer's name is provided to the Property Office. However, in many cases the source document, typically the Receiving receipt from the Purchase Order activity, reflected the vendor, not the manufacturer; therefore Receiving is not completely to blame for this discrepancy. If the requestor identified the manufacturer, and the subcontract administrator listed the manufacturer on the Purchase Order, this issue could be mitigated.

In conclusion, Berkeley Lab has found this performance measure to be much more difficult and time consuming to perform than originally anticipated. The research and documentation to determine the cause of the variances was the single largest effort and required the support of a variety of personnel. Since this was the first attempt at this particular performance measure, we have learned a number of lessons from the effort. We plan to use that knowledge to improve the process during subsequent years, and in the process to ensure that we benefit to the maximum of our ability from the effort expended. However, we also recognize that the success of this effort will hinge on Property Management's ability to work closely with both the Receiving and Procurement departments to avoid some of the pitfalls experienced initially.

Supporting Data

Rating:		0.0 Points Earned Out of 50				
Product Quality Core Measures		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Cum
Percent of Records from the Floor that Matched Database Records		N/A	N/A	87.2%	77.1%	80%
Total Number of Accurate Database Records in Sample		N/A	N/A	48	108	156
Total Number of Sampled Property Assets x 5 Data Element records (property #, nomenclature, manufacture, model #, serial #)		N/A	N/A	55	140	195

Objective #1
Criterion 1.1
Performance Measure 1.1.b

Introducing Best Business Practices to Improve Property Performance: *The Laboratory collaborates with other DOE/SC Laboratories in studying, identifying, and documenting property best practices for potential adoption at DOE/SC sites. All SC Laboratories are encouraged to participate in this activity by providing baseline information and by assisting in the research of non-DOE property systems and the assessment of their applicability. Included in this effort will be a review of other SC Laboratory property practices and procedures with the objective of developing a suite of validated SC Property System elements. The elements will be based on recognized or developed standards and accepted or developed practices.* **(Weight = 10%)**

Gradient:

Unsatisfactory: Little or no effort has been demonstrated towards the achievement of the performance measure.

Marginal: Some effort was demonstrated; however, results fell short of the expectations for a "Good" rating.

Good: The Laboratory contacted all SC Laboratories to collaborate in studying, identifying, and documenting property best practices for potential adoption at DOE/SC sites. A substantial amount of other SC Laboratory property practices and procedures were reviewed.

Excellent: The criterion for a "Good" rating has been met. In addition, new practices have been identified for possible implementation at the Laboratory.

Outstanding: The criterion for an "Excellent" rating has been met. In addition, new practices have been identified and some have been implemented at the Laboratory.

Performance Measure Result

The Laboratory initiated a collaborative process with the other nine DOE/SC laboratories during this performance period. This collaboration was intended to identify and document various best practices with respect to property management at each facility for potential adoption both at Berkeley Lab and across the DOE/SC complex. Nine best business practices were developed from this effort. Berkeley Lab anticipates working with our counterparts at DOE/OAK to recommend a course of action to promote these best business practices with the SC community. In addition, Berkeley Lab has already modified the Sensitive Item Policy, which was completed through the efforts and support of the three UC-managed laboratories, and Berkeley Lab has implemented the Custodian Accountability statement in two divisions, with plans to incorporate the statement throughout the Laboratory.

All SC laboratory property managers were invited to participate. The invitation, distributed on November 25, 2002, also proposed that the Laboratory develop a survey to establish a better understanding of the responsibilities shared by the laboratories, as well as those unique to each organization. The comprehensive survey was distributed on November 27, 2002. Berkeley Lab initially requested information on group name, head of

the group's title, group's organizational level within the laboratory, and organizational structure (centralized versus decentralized).

Survey

These introductory survey questions established a perspective on the structure of the various property-management organizations, allowing for a comparison of programs across the ten SC laboratories. Some of the conclusions reached from this analysis are listed below.

- Three of the property-management functions were aligned organizationally with Business Services, two were aligned with Procurement, and the rest were a mix of alignments with Security, Special Materials, and Facilities.
- The dominant organizational level was five degrees, meaning that the Property Manager was organizationally five steps below the Laboratory Director; however, four managers were only four steps below the Director. This organizational-level factor is important because it affects the visibility and credibility of a successful Property organization.
- The organizational structure was fairly evenly split between centralized and decentralized staff. The significant variance between laboratories was the number of decentralized employees matrixed to the Property organization**.**

  The highest number of decentralized staff was 54, and the lowest was 18; the average was 40. An interesting comparison is that the laboratory that had the highest number of decentralized staff also had the highest number of assets. The facility with 54 matrixed staff had almost 500 assets per decentralized staff member, versus Berkeley Lab, which had almost 900 assets per decentralized staff member.
- The most unusual result from the introductory survey questions asked whether the functional Property Management group had an advisory board. Berkeley Lab was the only laboratory that instituted such a board to support its work.

The balance of the survey addressed operational activities associated with each facility. This portion of the survey was intended to identify what areas of specific responsibility the property-management organization has and how they interface with other organizations at their laboratory. To achieve this comparison and to establish a baseline, the balance of the survey questions covered ten major subject areas, with over 90 separate areas requiring a response.

The ten major subject areas are as follows:

- Roles and responsibilities
- Authorities
- Records-management applications
- Web site functions
- Assets class and number
- Assets dollar value
- Inventory tracking methodology
- Communication/outreach activities
- General site information
- Sensitive-items listing

The results of these discrete responses provided a variety of conclusions, which are not part of this report; however, from a general perspective, all participants benefited from data comparison and deriving their own unique conclusions.

Results

Through the communication process between the various SC laboratory representatives, ideas were shared, concepts were discussed, and approaches were evaluated for handling similar property-related issues; these processes were documented in the survey results and in the minutes from the various conference calls. All ten SC laboratories participated, in some cases with three or four representatives on a conference call from the same site.

Berkeley Lab as a team has evaluated a number of business practices that the Laboratory shared in common, and the Laboratory has looked for alternative approaches that would benefit the community as a whole. Examples of these topics are listed below.

Sensitive-Item Policy

Berkeley Lab found the sensitive-item policy to be as widely diverse as our physical locations. Unfortunately, the Laboratory also found that reasons for classifying an asset as sensitive were also very diverse. The following conclusions are a sample of what resulted from this analysis.

- The Laboratory found the cost to inventory and maintain an asset was not a significant factor in determining which assets were classified as sensitive. Instead, the Laboratory found a more conservative basis for determining what was sensitive compared to business logic.

- Dollar threshold appeared to be a methodology used to identify a large grouping of assets as sensitive, yet because the dollar threshold was so high, the assets never achieved the minimum dollar threshold, i.e., $500 or $1,000.

- There was no standardization of sensitive assets, even though digital cameras (eight laboratories), computers (five laboratories), fax machines (six laboratories), and portable tools (six laboratories) were identified in many cases. It is interesting to note that only one other laboratory besides Berkeley Lab considers laptops and computers as sensitive assets. Also, the six laboratories that considered fax and portable tools as sensitive assets were not consistent in the balance of their sensitive-item listings.

There were a total of 47 different asset categories, excluding Precious Metals and Controlled Substances, listed in the survey, and only one of the ten sites controlled all 47 categories as sensitive.

Best Business Practice

Even though Berkeley Lab has agreed to work in concert with the other two UC laboratories to develop a common sensitive-item list, the Laboratory recommends that SC establish a standard list of sensitive categories and a uniform dollar threshold across the SC complex.

Transfers of Property

The Laboratory discovered that SC laboratories differ in their approach to both processing equipment transfers and deciding what should be transferred. Some of the conclusions that resulted from this analysis are listed below.

- The process of transferring property is normally a two-step process. First, the SF122 Transfer Order is signed off through the Property Management Office; the Financial Transfer Voucher is then prepared by Finance.

  The equipment transfer was recognized as a convoluted issue depending on whether the work was being performed under an Integrated Contractor agreement or not (i.e., equipment transferred from one DOE laboratory to another).

- Title to and fiscal responsibility for assets were not always clear. If the fabrication components were purchased through the laboratory fabricating the asset, it was frequently not clear as to which laboratory had fiscal responsibility for the asset.

- In some cases, Construction Work in Process (CWIP) assets were physically purchased and fabricated at one site, but "costed" as CWIP at another destination site prior to delivery.

- The laboratories expended time discussing the transfer of property between various laboratories, the Department of Energy, and the CERN accelerator located in Switzerland, in support of the Large Hadron

Collider (LHC). The issue was eventually brought to a close, but it was helpful to concertedly work through the issue.

Best Business Practices

1. The transfer process needs to be reviewed by SC from both the property-management and accounting perspectives to ensure that both physical and financial transfers occur within the same time period.
2. Clear definitions of the party responsible for fabricated assets under Integrated Contractor agreements and the vehicle used to ensure timely transfer of both physical and financial assets need to be established and disseminated to SC laboratories.
3. In the future, when large, joint research efforts such as LHC are being implemented, we recommend that the Organizational Property Management Officer be informed in advance to avoid delays and miscommunication, especially when a foreign country is involved.

Accountability of Property

Establishing policies and procedures for the accountability of property was discussed at length, with two resulting options:

- Inform property custodians that they are financially liable for assets in their name, and that they must reimburse the institution if the assets are lost.
- Inform property custodians that they are responsible for assets in their name, and that if they cannot account for the asset, disciplinary action will occur.

Even though the first option seemed to be the most aggressive method of enforcement, there was general agreement that either the property custodians would not be willing to accept custodianship of assets or the laboratories could not enforce the repayment of lost assets.

Therefore, it was concluded that Human Resources policies and procedures need to incorporate appropriate disciplinary action based on a graded approach. Efforts to initiate this process have already started at Berkeley Lab. An even more significant change has already been initiated by several divisions in Berkeley Lab: including in the annual performance review a statement of the employees' accountability for property.

Best Business Practice

Recommend to SC that during annual employee performance reviews, each employee be required to submit their Custodian Accountability report and verify that they currently have the asset under their accountability.

In conclusion, as part of this effort, Berkeley Lab was able to identify five different best business practices to recommend to SC for implementation across the complex, some of which the Laboratory has either initiated or has begun implementing. The practices are:

1. Standardization of the sensitive-item policy.
2. Review and modification of the transfer process for both Property Management and Finance.
3. Definition agreement of the methodology to be used for property transfer/disposition for integrated contractor agreements.
4. Inclusion of the Organization of Property Management Officers in the process for SC-wide research programs, such as the LHC.
5. Implementation of an SC custodian-accountability process as part of the annual performance review process.

Berkeley Lab has completed the first best business practice, in conjunction with the other two UC laboratories. The fifth practice has been proposed to the Laboratory's Human Resources Department, and several divisions have already implemented the process.

Successes/ Shortfalls

The communication and comparison of our various business practices has been a rewarding experience. We anticipate continuing the conference calls in the future. However, our goal will be to modify the process to ensure a more cohesive and committed participation. We anticipate developing more significant best business practices for the SC contractor community as well as for DOE.

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Mr. George Reyes

Functional Area: Facilities

Evaluation Team: David Chen, Richard Takahashi

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
The FY03 Facilities Management Self Assessment Report transmitted August 11, 2003 properly, accurately and completely addressed the POCMs, assumptions and agreements documented in the Prime Contract. In all cases, conclusions were supported by the data presented.

Accuracy and Completeness:
All validated calculations and supporting documents were found to be accurate and credible.

Adequacy of Supporting Documentation:
Validation of a judgmentally selected sample of supporting documents and data indicated that the departmental records adequately supports the information, conclusions and assertions made in the Self Assessment Report.

Signatures:

David Chen, Team Leader — Date 9/16/03

Richard Takahashi, Team Member — Date 9/23/03

Terry Hamilton, Audit Manager — Date 9/22/03

Cc:
Steve McGrath, UCOP
Warren Yip, DOE

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Teresa Rossi

Functional Area: Financial Management

Evaluation Team: Meredith Montgomery and Dwayne Ramsey

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
The draft Financial Management Self-Assessment Report received by us in June 2003 properly, completely and accurately addressed the POCM, assumptions and agreements as documented in the Prime Contract. Conclusions were supported by the data presented and improvement actions were specified where required and appropriate.

Accuracy and Completeness:
We found mathematical calculations and narratives to be accurate and complete.

Adequacy of Supporting Documentation:
Based upon our verification of judgmentally selected sample of documents, we found that the information and assertions made in the Self-Assessment report were adequately supported.

Signatures:

Meredith Montgomery, Team Leader — Date 9/22/03

Dwayne Ramsey, Team Member — Date 09/10 3

Terry Hamilton, Audit Manager — Date 9/22/03

Cc:
Sergio Nevel, UCOP
Gloria Gill, UCOP
Eileen Rountree-McLennan, DOE

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Michael Chartock

Functional Area: Laboratory Management

Evaluation Team (name, title, organizational affiliation):
Terry Hamilton, Team Lead, Audit Manager, Internal Audit Services
Edna Kolandaisamy, Team Member, Audit Specialist, Internal Audit Services

Purpose: The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
We reviewed the August 1, 2003 draft of the Laboratory Management Self-Assessment Report for FY03 as part of the annual Laboratory-directed independent evaluation (IE) process. The IE Team completed a Pre-Evaluation Comments Worksheet based on our review of the August 1st, 2003 draft. This worksheet was distributed to the Laboratory Management Team and to DOE and UCLAO observers as the basis for discussion at the IE validation meeting on August 26, 2003. Our review of the Self-Assessment report and supporting documentation indicates that Laboratory Management has adequately demonstrated that it has met the contractual performance objectives, criteria and measure for FY03. We concur with Laboratory Management's performance results and conclusions as presented in their Self-Assessment Report.

During the IE validation meeting held on August 26, 2003, we discussed opportunities to improve the clarity of the report and made suggestions that would more accurately demonstrate performance results. Laboratory Management indicated that they would make clarifications and revisions in the report based on our worksheet and discussion. Both UCLAO and DOE/BSO were represented at this meeting.

Accuracy and Completeness:
The performance results and conclusions are deemed accurate and complete. The Laboratory Management Team responded to all of our questions to our satisfaction.

Adequacy of Supporting Documentation:
We consider the supporting documentation to be reasonable, adequate and supportive of stated performance results.

Signatures:

Edna Kolandaisamy — 9/22/03
Edna Kolandaisamy — Date

Terrence L. Hamilton — 9/22/03
Terry Hamilton, Audit Manager — Date

Cc:
Dick Nolan, DOE/BSO
Joe Krupa, DOE/BSO
Buck Koonce, UCLAO
Suzanne Stroh, UCLAO

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Randolph Scott

Functional Area: Human Resources

Evaluation Team: Suzanne Bowen, ASD Academy, LBNL
Julia Rudniski, Budget analyst, LBNL

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
In general, the draft FY2003 Human Resources Self-Assessment Report received by us on August 5, 2003 properly, completely and accurately addressed the POCM's, assumptions and agreements as documented in the Prime Contract. Conclusions were supported by the data presented plus the additional documentation provided, and recommended improvement actions were specified where required and appropriate.

Accuracy and Completeness:

We found the narratives to be accurate and complete. Human Resources agreed to include or consider our improvement suggestions.

Adequacy of Supporting Documentation:

Based upon our verification of a selected sample of documents, we found that the information and assertions made in the Self-Assessment report were adequately supported.

Signatures:

Suzanne Bowen — Date: Sept 2, 2003

Julia Rudniski — Date: Sept. 5, 2003

Terry Hamilton, Audit Manager — Date: 9/22/03

Cc: Ms. Cynthia Coolahan
Ms. Margo Triassi
Mr. Sam Gibson

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Berkeley Lab FY 2003 Performance Self-Assessment
Independent Evaluation Report

To: Mr. Sandy Merola

Functional Area: Information Management

Evaluation Team: Kim Martens, Maya Drexler

Purpose: The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation: In general, the draft FY03 Information Management Self-Assessment Report received by us on August 8, 2003 properly, completely and accurately addressed the POCMs, assumptions and agreements as documented in the Prime Contract. Conclusions were supported by the data presented and improvement actions were specified where required and appropriate.

Accuracy and Completeness: To the degree inspected in this process the report and supplemental materials appear accurate and factual. Information Management will consider all of our improvement suggestions.

Adequacy of Supporting Documentation: Based upon our verification of a judgmentally selected sample of documents, we found that the information and assertions made in the Self-Assessment report are adequately supported.

Signatures:

K A Martens, IE Team Leader — August 12, 2003 Date

M S Drexler, IE Team Member — August 12, 2003 Date

T L Hamilton, Audit Manager — August 12, 2003 Date

Cc:
Mr. Sam Gibson, UCOP
Ms. Diana Williams, DOE-OAK
Ms. Melna Jones, DOE-OAK

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Bill Llewellyn

Functional Area: Property Management

Evaluation Team: Jim Yoshihara, Edna Kolandaisamy

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
The draft Property Management Self-Assessment Report received by us on August 6, 2003 properly, completely and accurately addressed the POCM, assumptions and agreements as documented in the Prime Contract. Conclusions were supported by the data presented and improvement actions were specified where required and appropriate.

We sought an explanation regarding Property Management's assertion that the 39 control number asset identifiers, representing $76 million of unidentified equipment did not negatively impact the Lab's performance. Property Management representatives indicated that although the population from with the statistical sample was drawn included the 39 control number assets, none of the 39 was selected for validation and hence, this year's performance was unaffected. DOE and UCLAO concurred with this explanation. Property Management indicated that the final self-assessment report would include a narrative on the issue of the 39 control number assets.

Accuracy and Completeness:
We found mathematical calculations and narratives to be, for the most part, accurate and complete. Property Management agreed to correct all calculation discrepancies we brought to their attention.

Adequacy of Supporting Documentation:
Based upon our verification of judgmentally selected sample of documents, we found that the information and assertions made in the Self-Assessment report were adequately supported.

Signatures:

Jim Yoshihara, Team Leader — Date 9/22/03

Edna Kolandaisamy, Team Member — Date 9/22/03

Terry Hamilton, Audit Manager — Date 9/22/03

Cc: Lee Williams, DOE-OAK
Chuck McDonald, UCOP
Kate Ahearn, UCOP

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Richard Arri

Functional Area: Procurement

Evaluation Team: Adel Flores, Paul Franke

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
We have reviewed the Procurement Self-Assessment Report for FY 2003 that included results up to June 30, 2003 as part of the Berkeley Lab-directed evaluation process. We validated the results of measured activities described in the report by reviewing supporting documentation and computations. We discussed our questions and comments with Procurement through a validation meeting and follow-up discussions. DOE and UC observers attended the validation meeting. As a result of discussions with Procurement, clarifications and revisions were incorporated in the report.

In accordance with Berkeley Lab evaluation protocol, we did not evaluate the rating and activity scores/points in the self-assessment report, PROAM sub-gauges and FY 2003 Procurement System Assessment Approval rating sheet.

In our opinion, the Procurement Self-Assessment Report for FY 2003 addressed adequately, accurately, objectively and credibly the performance objectives, criteria and measures specified in Section C, Appendix F of Contract 98. We concur with Procurement's conclusions and quantifiable performance results presented in their Self-Assessment Report excluding the above-mentioned rating and scores/points, which are outside the scope of our evaluation.

Accuracy and Completeness:
We found the narratives and mathematical calculations to be accurate and complete. All of our questions and requests for clarification were answered to our satisfaction.

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Adequacy of Supporting Documentation:
We found the supporting documentation to be acceptable and sufficient basis for the self-assessment report. Procurement provided all documentation that we requested.

Signatures:

Adel Flores, Team Leader — Date 9/23/03

Paul Franke, Team Member — Date 9/23/2003

Terrence L. Hamilton, Audit Manager — Date 9/22/03

Cc: David Chen, LBNL
Maria Robles, DOE
Randy Gon, DOE
Kate Ahearn, UC

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Mr. George Reyes

Functional Area: Facilities

Evaluation Team: David Chen, Richard Takahashi

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
The FY03 Facilities Management Self Assessment Report transmitted August 11, 2003 properly, accurately and completely addressed the POCMs, assumptions and agreements documented in the Prime Contract. In all cases, conclusions were supported by the data presented.

Accuracy and Completeness:
All validated calculations and supporting documents were found to be accurate and credible.

Adequacy of Supporting Documentation:
Validation of a judgmentally selected sample of supporting documents and data indicated that the departmental records adequately supports the information, conclusions and assertions made in the Self Assessment Report.

Signatures:

David Chen, Team Leader — Date 9/16/03

Richard Takahashi, Team Member — Date 9/23/03

Terry Hamilton, Audit Manager — Date 9/22/03

Cc:
Steve McGrath, UCOP
Warren Yip, DOE

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Teresa Rossi

Functional Area: Financial Management

Evaluation Team: Meredith Montgomery and Dwayne Ramsey

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
The draft Financial Management Self-Assessment Report received by us in June 2003 properly, completely and accurately addressed the POCM, assumptions and agreements as documented in the Prime Contract. Conclusions were supported by the data presented and improvement actions were specified where required and appropriate.

Accuracy and Completeness:
We found mathematical calculations and narratives to be accurate and complete.

Adequacy of Supporting Documentation:
Based upon our verification of judgmentally selected sample of documents, we found that the information and assertions made in the Self-Assessment report were adequately supported.

Signatures:

Meredith Montgomery, Team Leader — Date 9/22/03

Dwayne Ramsey, Team Member — Date 09/10 3

Terry Hamilton, Audit Manager — Date 9/22/03

Cc:
Sergio Nevel, UCOP
Gloria Gill, UCOP
Eileen Rountree-McLennan, DOE

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Michael Chartock

Functional Area: Laboratory Management

Evaluation Team (name, title, organizational affiliation):
Terry Hamilton, Team Lead, Audit Manager, Internal Audit Services
Edna Kolandaisamy, Team Member, Audit Specialist, Internal Audit Services

Purpose: The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
We reviewed the August 1, 2003 draft of the Laboratory Management Self-Assessment Report for FY03 as part of the annual Laboratory-directed independent evaluation (IE) process. The IE Team completed a Pre-Evaluation Comments Worksheet based on our review of the August 1st, 2003 draft. This worksheet was distributed to the Laboratory Management Team and to DOE and UCLAO observers as the basis for discussion at the IE validation meeting on August 26, 2003. Our review of the Self-Assessment report and supporting documentation indicates that Laboratory Management has adequately demonstrated that it has met the contractual performance objectives, criteria and measure for FY03. We concur with Laboratory Management's performance results and conclusions as presented in their Self-Assessment Report.

During the IE validation meeting held on August 26, 2003, we discussed opportunities to improve the clarity of the report and made suggestions that would more accurately demonstrate performance results. Laboratory Management indicated that they would make clarifications and revisions in the report based on our worksheet and discussion. Both UCLAO and DOE/BSO were represented at this meeting.

Accuracy and Completeness:
The performance results and conclusions are deemed accurate and complete. The Laboratory Management Team responded to all of our questions to our satisfaction.

Adequacy of Supporting Documentation:
We consider the supporting documentation to be reasonable, adequate and supportive of stated performance results.

Signatures:

Edna Kolandaisamy — 9/22/03
Edna Kolandaisamy — Date

Terrence L. Hamilton — 9/22/03
Terry Hamilton, Audit Manager — Date

Cc:
Dick Nolan, DOE/BSO
Joe Krupa, DOE/BSO
Buck Koonce, UCLAO
Suzanne Stroh, UCLAO

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Randolph Scott

Functional Area: Human Resources

Evaluation Team: Suzanne Bowen, ASD Academy, LBNL
Julia Rudniski, Budget analyst, LBNL

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
In general, the draft FY2003 Human Resources Self-Assessment Report received by us on August 5, 2003 properly, completely and accurately addressed the POCM's, assumptions and agreements as documented in the Prime Contract. Conclusions were supported by the data presented plus the additional documentation provided, and recommended improvement actions were specified where required and appropriate.

Accuracy and Completeness:

We found the narratives to be accurate and complete. Human Resources agreed to include or consider our improvement suggestions.

Adequacy of Supporting Documentation:

Based upon our verification of a selected sample of documents, we found that the information and assertions made in the Self-Assessment report were adequately supported.

Signatures:

Suzanne Bowen — Date: Sept 2, 2003

Julia Rudniski — Date: Sept. 5, 2003

Terry Hamilton, Audit Manager — Date: 9/22/03

Cc: Ms. Cynthia Coolahan
Ms. Margo Triassi
Mr. Sam Gibson

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Berkeley Lab FY 2003 Performance Self-Assessment
Independent Evaluation Report

To: Mr. Sandy Merola

Functional Area: Information Management

Evaluation Team: Kim Martens, Maya Drexler

Purpose: The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation: In general, the draft FY03 Information Management Self-Assessment Report received by us on August 8, 2003 properly, completely and accurately addressed the POCMs, assumptions and agreements as documented in the Prime Contract. Conclusions were supported by the data presented and improvement actions were specified where required and appropriate.

Accuracy and Completeness: To the degree inspected in this process the report and supplemental materials appear accurate and factual. Information Management will consider all of our improvement suggestions.

Adequacy of Supporting Documentation: Based upon our verification of a judgmentally selected sample of documents, we found that the information and assertions made in the Self-Assessment report are adequately supported.

Signatures:

K A Martens, IE Team Leader — August 12, 2003 Date

M S Drexler, IE Team Member — August 12, 2003 Date

T L Hamilton, Audit Manager — August 12, 2003 Date

Cc:
Mr. Sam Gibson, UCOP
Ms. Diana Williams, DOE-OAK
Ms. Melna Jones, DOE-OAK

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Bill Llewellyn

Functional Area: Property Management

Evaluation Team: Jim Yoshihara, Edna Kolandaisamy

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
The draft Property Management Self-Assessment Report received by us on August 6, 2003 properly, completely and accurately addressed the POCM, assumptions and agreements as documented in the Prime Contract. Conclusions were supported by the data presented and improvement actions were specified where required and appropriate.

We sought an explanation regarding Property Management's assertion that the 39 control number asset identifiers, representing $76 million of unidentified equipment did not negatively impact the Lab's performance. Property Management representatives indicated that although the population from with the statistical sample was drawn included the 39 control number assets, none of the 39 was selected for validation and hence, this year's performance was unaffected. DOE and UCLAO concurred with this explanation. Property Management indicated that the final self-assessment report would include a narrative on the issue of the 39 control number assets.

Accuracy and Completeness:
We found mathematical calculations and narratives to be, for the most part, accurate and complete. Property Management agreed to correct all calculation discrepancies we brought to their attention.

Adequacy of Supporting Documentation:
Based upon our verification of judgmentally selected sample of documents, we found that the information and assertions made in the Self-Assessment report were adequately supported.

Signatures:

Jim Yoshihara, Team Leader — Date 9/22/03

Edna Kolandaisamy, Team Member — Date 9/22/03

Terry Hamilton, Audit Manager — Date 9/22/03

Cc: Lee Williams, DOE-OAK
Chuck McDonald, UCOP
Kate Ahearn, UCOP

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Berkeley Lab FY 2003 Performance Self-Assessment Independent Evaluation Report

To: Richard Arri

Functional Area: Procurement

Evaluation Team: Adel Flores, Paul Franke

Purpose:
The independent evaluations are Berkeley Lab management reviews. Their value is to ensure that the self-assessments adequately, accurately, objectively, and credibly address the performance measures, assumptions, and agreements. They are not audits of the Functional Areas.

Overall Evaluation:
We have reviewed the Procurement Self-Assessment Report for FY 2003 that included results up to June 30, 2003 as part of the Berkeley Lab-directed evaluation process. We validated the results of measured activities described in the report by reviewing supporting documentation and computations. We discussed our questions and comments with Procurement through a validation meeting and follow-up discussions. DOE and UC observers attended the validation meeting. As a result of discussions with Procurement, clarifications and revisions were incorporated in the report.

In accordance with Berkeley Lab evaluation protocol, we did not evaluate the rating and activity scores/points in the self-assessment report, PROAM sub-gauges and FY 2003 Procurement System Assessment Approval rating sheet.

In our opinion, the Procurement Self-Assessment Report for FY 2003 addressed adequately, accurately, objectively and credibly the performance objectives, criteria and measures specified in Section C, Appendix F of Contract 98. We concur with Procurement's conclusions and quantifiable performance results presented in their Self-Assessment Report excluding the above-mentioned rating and scores/points, which are outside the scope of our evaluation.

Accuracy and Completeness:
We found the narratives and mathematical calculations to be accurate and complete. All of our questions and requests for clarification were answered to our satisfaction.

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Adequacy of Supporting Documentation:
We found the supporting documentation to be acceptable and sufficient basis for the self-assessment report. Procurement provided all documentation that we requested.

Signatures:

Adel Flores, Team Leader — Date 9/23/03

Paul Franke, Team Member — Date 9/23/2003

Terrence L. Hamilton, Audit Manager — Date 9/22/03

Cc: David Chen, LBNL
Maria Robles, DOE
Randy Gon, DOE
Kate Ahearn, UC

Acronyms and Abbreviations

AAAHC	Accreditation Association for Ambulatory Health Care
AALA	American Association of Laboratory Accreditation
ABB	activity-based budgeting
ACWP	actual cost of work performed
A-E	architect-engineer
AHD	activity hazard document
ALS	Advanced Light Source
AMA	American Management Association
AMPS	Assessment Management Plans
AMS	Asset Management System
A/P	accounts payable
APT	alternative procurement approaches/techniques
ASD	Administrative Services Department
B2B	business to business
B&R	budget and reporting
BAR	Billing and Accounts Receivable
BBEI	Berkeley Biotechnology Education, Inc.
BCPs	baseline change proposals
BCWP	budgeted cost of work performed
BCWS	budgeted cost of work schedule
BES	Basic Energy Sciences
BETS	Budget Estimating and Tracking System
BLIS	Berkeley Lab Information Systems
BMIS	Business Management Information System
BMP	best management practices
BPDC	Best Practices Diversity Council
BRO	Name for Berkeley Lab's computer intrusion-detection system
BRS	Base Radio Station
BSC	balanced scorecard
BSO	Berkeley Site Office (DOE)
BTU	British thermal unit
CAS	cost accounting standards
CCI	Community College Initiative

CD	critical decision
CEQA	California Environmental Quality Act
CFO	Chief Financial Officer
CIS	Computing Infrastructure Support
CNG	compressed natural gas
CO	Contracting Officer
CPA	certified public accountant
CPEC	California Post-Secondary Education Commission
CPIC	Computer Protection Implementation Committee
CPO	Chief Procurement Officer
CPP	Computer Protection Program
CPPM	Computer Protection Program Manager
CRADAs	Collaborative Research and Development Activities
CRCPD	Conference of Radiation Control Program Directors
CS	Computing Sciences Division
CSAC	Computing Sciences Advisory Committee
CSE	computer systems engineers
CSEE	Center for Science and Engineering Education
CSPP	Cyber Security Program Plan
CTM	cost-to-market
CV	cost variance
CWIP	construction work in progress
CY	calendar year
DAC	Directors' Action Committee
DARPA	Defense Advanced Research Projects Agency
DDM	Division Directors Meeting
DDO	Deputy Director for Operations
DEMP	Departmental Energy Management Program
DOD	Department of Defense
DOE	Department of Energy
DOE/EH	DOE Office of Environment, Safety, and Health
DOELAP	DOE Laboratory Accreditation Program
DOE/OAK	DOE Oakland Operations Office
DTSC	Department of Toxic Substances Control (State of California)
DPO	distributed procurement unit
EA	Environmental Assessment

ECSC	Enterprise Computing Steering Committee
EDI	electronic data interchange
EFT	electronic fund transfers
EH&S	Environment, Health, and Safety Division
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EL	excursion level
ELAP	Environmental Laboratory Accreditation Program
EM	environmental management
EMCS	energy management control system
EMS	energy management system
EMV	estimated market value
EPA	Environmental Protection Agency
ePME	Electronic Portfolio Management, Tracking, and Reporting Environment
ERP	Environmental Restoration Program
ES&H	environment, safety, & health (DOE)
ESG	Executive Streamlining Group
ESNet	Energy Sciences Network
EUVL	extreme ultraviolet lithography
FAQ	frequently asked question
FaST	faculty and student teams
FEMA	Federal Energy Management Agency
FEMP	Federal Energy Management Program
FIMS	Facilities Inventory Management System
FMPAM	Financial Management Performance Assessment
FMS	Financial Management System
FMSIC	Financial Management Systems Improvement Council
FNAL	Fermi National Accelerator Laboratory
FPP	field planning proposal
FSCR	functional support cost report
FSD	Field Support Department
FSD	Financial Services Department
FTE	full time equivalent
FTP	Field Task Proposal
FWO	flexible work options
FWP	Field Work Proposal

FY	Fiscal Year
GAO	(U.S.) General Accounting Office
GIS	Geographic Information System
GL	general ledger
GMRA	Government Management Reform Act
GPE	general plant equipment
GPP	General Plant Projects
GS	General Sciences
GSA	Government Services Agency
GSF	gross square foot
HCA	Head of Contracting Activity
HEAR	Hazards, Equipment, Authorizations, and Review
HEF	Hills Emergency Forum
HEPAP	High Energy Physics Advisory Panel
HERL	Heavy Element Research Laboratory
HPS	Health Physics Society
HQ	Headquarters (DOE)
HR	Human Resources Department
HRCI	Human Resources Certification Institute
HVAC	heating, ventilating, and air conditioning
HWHF	Hazardous Waste Handling Facility
HZSB	hubzone small business
IAEM	International Association of Emergency Managers
IAS	Internal Audit Services
ICPT	integrated contractor purchasing team
IFA	Integrated Functional Appraisal
IFE	internal fusion energy
IG	Inspector General
IIP	individual implementation plan
IM	Information Management
INPO	Institute of Nuclear Power Operations
IPABS	Integrated Planning, Accountability, and Budgeting System
IRIS	Integrated Reporting Information System
IS	Initial Study
ISM	Integrated Safety Management
ISO	International Standards Organization

ISS	Information Systems and Services
ISS/CIS	Information Systems and Services/Computing Infrastructure Support
ISSM	Integrated Safeguards and Security Management
ITSD	Information Technologies and Services Division
JGI	Joint Genome Institute
JIT	just in time
LANL	Los Alamos National Laboratory
LBNL	Lawrence Berkeley National Laboratory
LCATS	Berkeley Lab Corrective Action Tracking System
LDRD	Laboratory Directed Research and Development
LDRS	Labor Distribution and Reporting System
LEED	Leadership in Energy and Environmental Design
LER	Labor/Employee Relations
LETS	Laboratory Employee Timekeeping System
LHC	Large Hadron Collider
LLNL	Lawrence Livermore National Laboratory
LRDP	Long Range Development Plan
LSAD	Laboratory Self-Assessment Database
LSD	Life Sciences Division
LUX	Linac-based Ultrafast X-ray Source
LWC	lost workday cases
MARS/FIS	Management Analysis Reporting System/Financial Information System
MCC	merchant category code
MF	Molecular Foundary
MOU	Memorandum of Understanding
MRO	maintenance repair/operation
MRS	Material Release System
MSAP	Management Self-Assessment Program
NASA	National Aeronautics and Space Administration
NCA	noncapital alterations
NCAR	Nonconformance and Corrective Action Report
NEMA	National Energy Management Association
NEPA	National Environmental Policy Act
NERSC	National Energy Research Scientific Computing Center
NIH	National Institutes of Health
NIST	National Institute of Standards and Technology

NPMA	National Property Management Association
NSF	National Science Foundation
NTS	Noncompliance Tracking System
NVLAP	National Voluntary Laboratory Accreditation Program
OA	operation awareness
OAA	Office of Assessment and Assurance
OAP	Operating and Assurance Plan
OCL	obligation control levels
OCM	Office of Contract Management
OIG	(U.S.) Office of the Inspector General
OJT	on-the-job training
OPI	other-party identifier
OPS	Operations
ORNL	Oak Ridge National Laboratory
ORPS	occurrence reporting system
OSF	Oakland Scientific Facility
OSHA	Occupational Safety and Health Administration
OSTI	Office of Science and Technology Information
%CV	percent cost variance
PBD	Physical Biosciences Division
PI	Performance Improvement
PIMB	Project Integration and Management Board
PM	performance measure
PM/PdM	preventive/predictive maintenance
PMTS	Project Management Tracking System
POCM	Performance Objectives, Criteria, and Measures
PPPL	Princeton Plasma Physics Laboratory
PNNL	Pacific Northwest National Laboratory
PPAM	Property Performance Assessment Model
PRD	Performance Review and Development
PROAM	Procurement Performance, and Assessment Model
PRP	Procurement, Receiving, and Payables
PS	PeopleSoft
PSA	personal services agreement
PST	Pre-Service Teacher Program
PTS	Project Tracking System

PUG	Procurement/Receiving/Payables User's Group
QA/AC	quality assurance/quality control
R&D	research and development
RADAR	Radiation Authorization Database and Reports
RAPID	Research Administration Proposal/Project Information Database System
RAPT	Rapid and Alternative Procurement Transaction
RFIC	request for issuance of check
RFP	request for proposal
RHIC	Relativistic Heavy Ion Collider
RMA	radiological material area
ROI	Return on Investment Program, return on investment
RPM	Regulations and Procedures Manual
RPM	Risk-Based Prioritization Method
RWA	Radiological Work Authorization
RWO	Reimbursable Work Order
RWP	Radiation Work Permit
S&E	scientists and engineers; science and engineering
SA	self-assessment
SAA	Satellite Accumulation Area
SB	Small Business
SBA	Small Business Administration
SBSA	Small Business Set-Aside
SC	Office of Science (DOE)
SciDAC	Scientific Discovery through Advanced Computing
SDB	small disadvantaged business
SF	square foot
SFFAS	Statement of Federal Financial Accounting Standards
SFP	Strategic Facilities Plan
SGL	standard general ledger
SIC	standard industrial classification
SNAP	SuperNova/Acceleration Probe
SPO	Sponsored Projects Office
SPPT	Sponsored Proposal/Projects Tracking
SRC	Safety Review Committee
SSA	sealed source authorization
STAR	Solenoidal Tracker at RHIC

STARS	Standard Accounting and Reporting System
SULI	Science Undergraduate Laboratory Internship
TEID	Technical and Electronic Information Department
TRC	total recordable case rate
TSD	Technical Services Department
UC	University of California
UCDRD	University of California Directed Research and Development
UCLA	University of California at Los Angeles
UCLAO	University of California Laboratory Administration Office
UCOP	University of California, Office of the President
UCRS	University of California Retirement System
UPTE	Union of Professional and Technical Employees
VOSB	veteran-owned small business
VPP	Voluntary Protection Program
WFDO	Workforce Diversity Office
WFO	work for others
WOSB	women-owned small business
WSG	Worker Safety Group
WSS	Work Smart Standards
YTD	year to date